BOTOX® onabotulinumtoxinA injection

New Companion App

3D Spasticity

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BOTOX ACADEMY

Injection Workbook for **Adult Spasticity**

Examining Patient Assessment, Advanced Anatomy, and Injection Considerations

Indications

Adult Spasticity:

Adult Upper Limb Spasticity

BOTOX® for injection is indicated for the treatment of upper limb spasticity in adult patients to decrease the severity of increased muscle tone in elbow, wrist, finger, and thumb flexors (biceps, flexor carpi radialis, flexor carpi ulnaris, flexor digitorum profundus, flexor digitorum sublimis, adductor pollicis, and flexor pollicis longus).

Adult Lower Limb Spasticity

BOTOX® is indicated for the treatment of lower limb spasticity in adult patients to decrease the severity of increased muscle tone in ankle and toe flexors (gastrocnemius, soleus, tibialis posterior, flexor hallucis longus, and flexor digitorum longus).

Limitations of Use

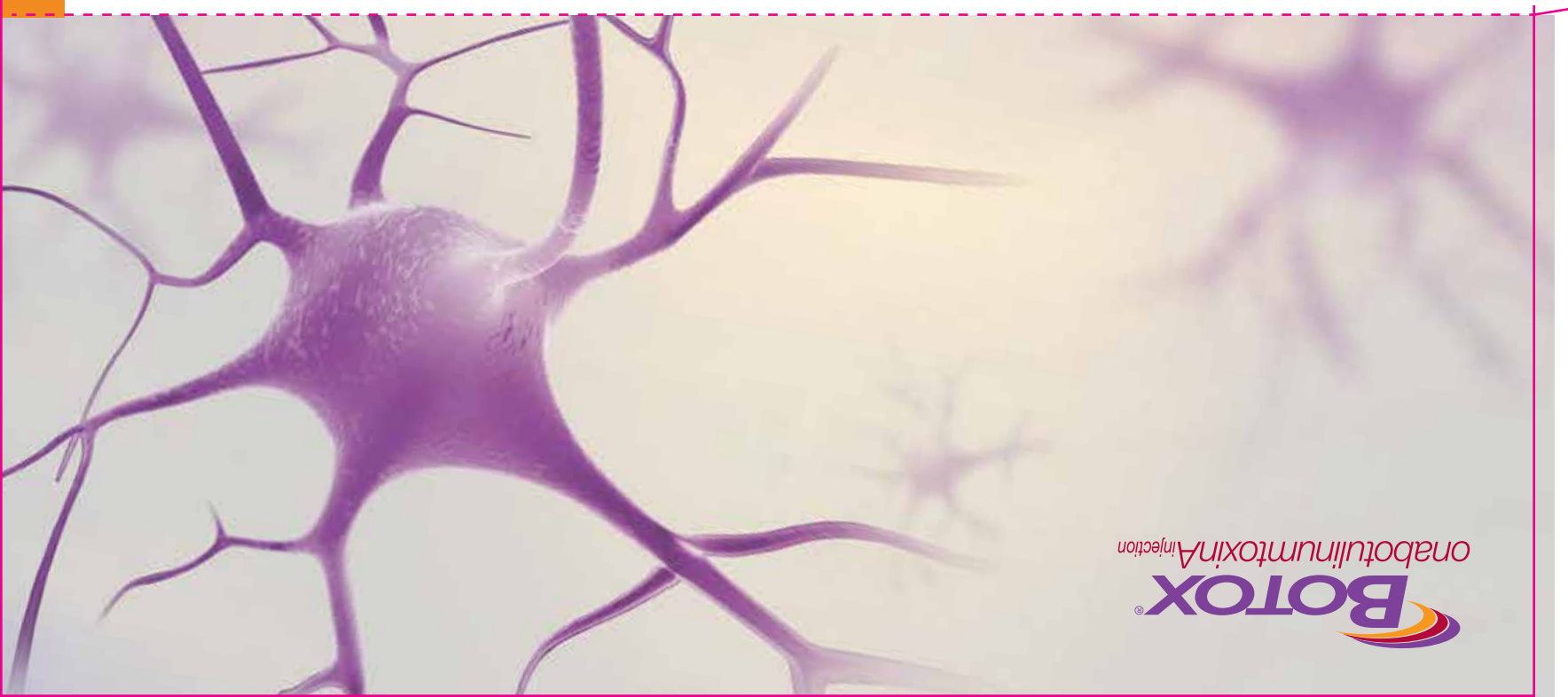
Safety and effectiveness of BOTOX® have not been established for the treatment of other upper or lower limb muscle groups. BOTOX® has not been shown to improve upper extremity functional abilities, or range of motion at a joint affected by a fixed contracture.

IMPORTANT SAFETY INFORMATION, INCLUDING BOXED WARNING

WARNING: DISTANT SPREAD OF TOXIN EFFECT

Postmarketing reports indicate that the effects of BOTOX® and all botulinum toxin products may spread from the area of injection to produce symptoms consistent with botulinum toxin effects. These may include asthenia, generalized muscle weakness, diplopia, ptosis, dysphagia, dysphonia, dysarthria, urinary incontinence, and breathing difficulties. These symptoms have been reported hours to weeks after injection. Swallowing and breathing difficulties can be life threatening, and there have been reports of death. The risk of symptoms is probably greatest in children treated for spasticity, but symptoms can also occur in adults treated for spasticity and other conditions, particularly in those patients who have an underlying condition that would predispose them to these symptoms. In unapproved uses and in approved indications, cases of spread of effect have been reported at doses comparable to those used to treat Cervical Dystonia and spasticity and at lower doses.

Please see additional Indication and Important Safety Information about BOTOX® inside.



BOTOX® onabotulinumtoxinA injection

Introduction

This workbook is designed to help hone your skills in identifying and evaluating Adult Spasticity patients who may be appropriate BOTOX® candidates, as well as implementing the BOTOX® Treatment Framework. We'll also discuss the resources and services offered by Allergan® as part of our commitment to support your practice.

Table of contents

IMPORTANT SAFETY INFORMATION (continued)

CONTRAINDICATIONS

BOTOX® is contraindicated in the presence of infection at the proposed injection site(s) and in patients who are hypersensitive to any botulinum toxin product or to any of the components in the formulation.

WARNINGS AND PRECAUTIONS

Spread of Toxin Effect

See Boxed Warning.

Lack of Interchangeability Between Botulinum Toxin Products

The potency Units of BOTOX® are specific to the preparation and assay method utilized. They are not interchangeable with other preparations of botulinum toxin products and, therefore, Units of biological activity of BOTOX® cannot be compared to nor converted into Units of any other botulinum toxin products assessed with any other specific assay method.

Please see additional Important Safety Information about BOTOX® on following pages.

BOTOX® onabotulinumtoxinA injection

Integrate multiple approaches when assessing Adult Spasticity

Upper limb spasticity

Diagnosis Technique	Observations
Ask the patient what has impacted post-stroke treatment goals	"Muscle tightness" and "stiffness" are usually mentioned the most
Ask the patient if they have ever taken muscle relaxants	May indicate if another physician had noticed the spasticity
Have the patient stand up	Helps determine the effect of symptoms on balance and exposes the patient's limbs
Shake the patient's hand	Patient must extend 1 arm, allowing you to check for signs and symptoms in both limbs
Have patient raise their arms above their head and/or straight out	Allows you to quickly look for effects of spasticity on elbow, wrist, and fingers and/or straight out

Lower limb spasticity

Ambulatory Patients	Nonambulatory Patients*
Evaluate all affected joints of ankle and toe in all positions: supine, seated, standing, and moving	Look for potential skin breakdown caused by spasticity
Observe and evaluate patient's gait, including gait cycle, as part of determining severity	Compare positioning when sitting vs lying down
Measure the time it takes for patient to walk a set distance or get up from seated position and walk to a set point	Determine if patient's leg position impedes transfers

*Nonambulatory patients were excluded from the BOTOX® lower limb spasticity clinical trial.

It may be time to revisit these patients' treatment plans

Do you have Adult Spasticity patients in your practice who...

Are on muscle relaxants and only call in for refills?

Are not meeting treatment goals on current therapy?

Do not follow their treatment regimen?

Have finished PT/OT sessions, but want to continue working on symptoms?

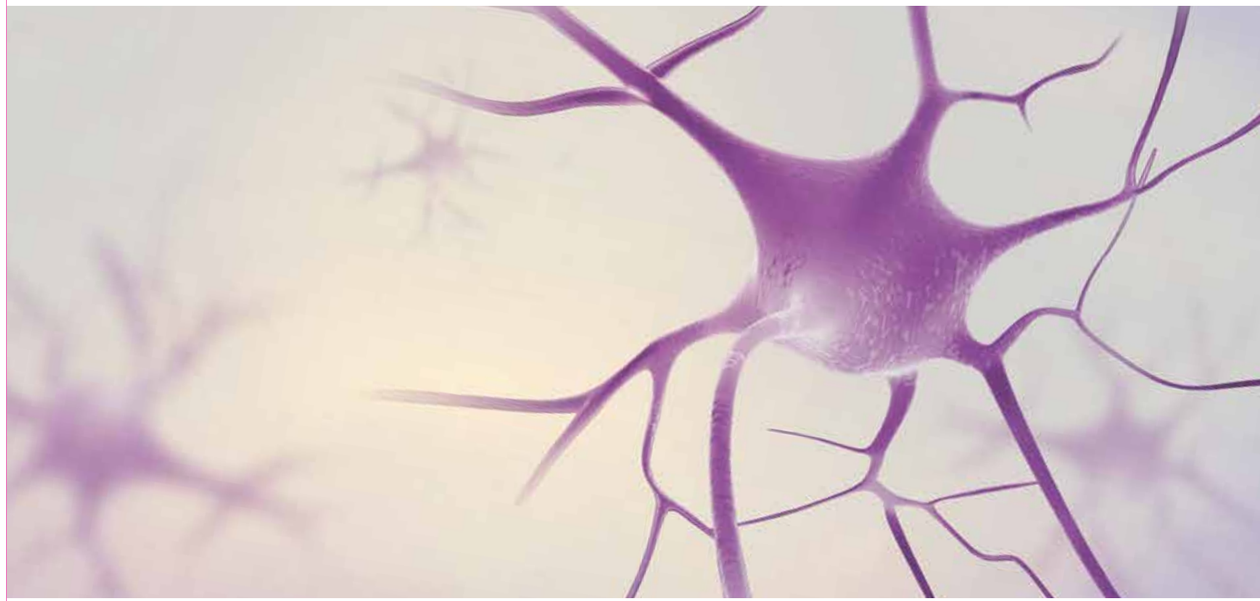
Are contraindicated to certain treatment options?

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use
Serious adverse reactions, including excessive weakness, dysphagia, and aspiration pneumonia, with some adverse reactions associated with fatal outcomes, have been reported in patients who received BOTOX® injections for unapproved uses. In these cases, the adverse reactions were not necessarily related to distant spread of toxin, but may have resulted from the administration of BOTOX® to the site of injection and/or adjacent structures. In several of the cases, patients had pre-existing dysphagia or other significant disabilities. There is insufficient information to identify factors associated with an increased risk for adverse reactions associated with the unapproved uses of BOTOX®. The safety and effectiveness of BOTOX® for unapproved uses have not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

BOTOX® onabotulinumtoxinA injection

Notes



Affected anatomy in Adult Spasticity

- The affected anatomy content provided in this section was developed in coordination with medical professionals
- It is meant to serve as an educational resource for muscle localization and patient assessment in Adult Spasticity
- Combination postures shown in this section reflect those commonly seen in clinical practice
- Muscles cited have been identified as contributors to the specific posture:
  - **Bold purple labels = Primary contributor to specified posture and approved for BOTOX®**
  - Standard purple labels = Secondary contributor to specified posture and approved for BOTOX®
  - Black labels = Contributor to specified posture and not approved for BOTOX®; for anatomical reference only

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Hypersensitivity Reactions

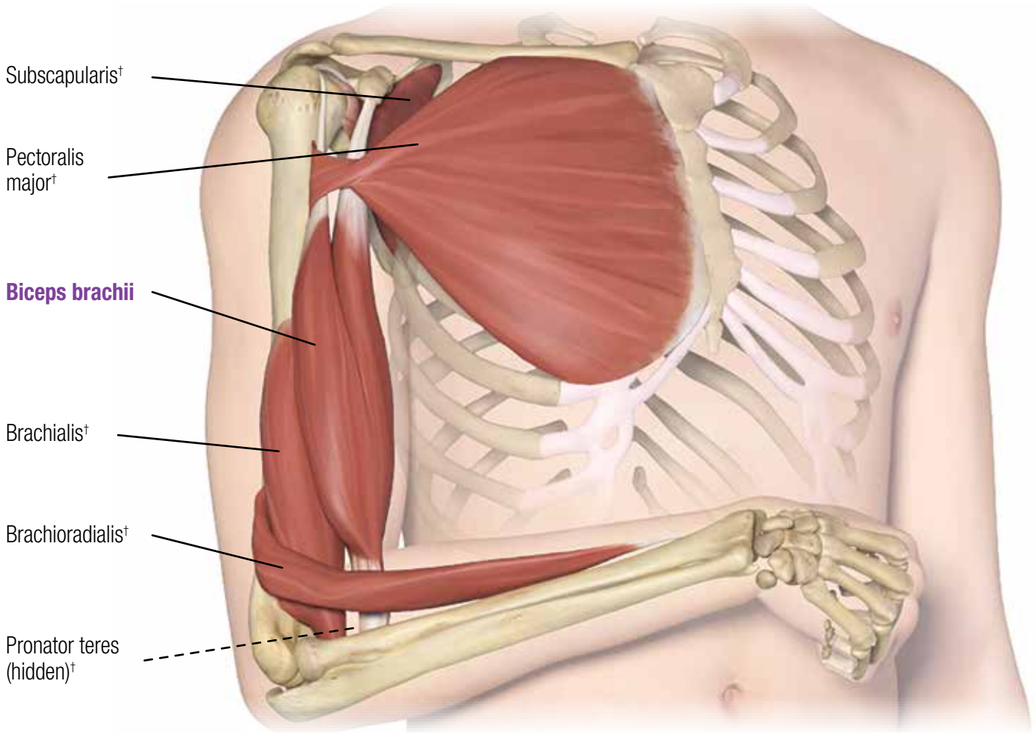
Serious and/or immediate hypersensitivity reactions have been reported. These reactions include anaphylaxis, serum sickness, urticaria, soft-tissue edema, and dyspnea. If such a reaction occurs, further injection of BOTOX® should be discontinued and appropriate medical therapy immediately instituted. One fatal case of anaphylaxis has been reported in which lidocaine was used as the diluent, and consequently the causal agent cannot be reliably determined.

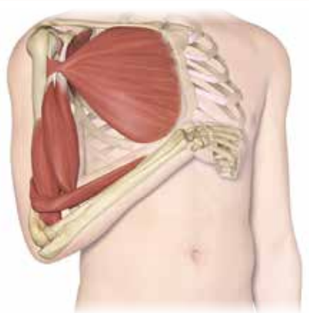
Please see additional Important Safety Information about BOTOX® on following pages.

Clinical presentation in upper limb

Upper limb posture combination*

Flexed elbow, pronated forearm, flexed wrist, flexed fingers, thumb in palm





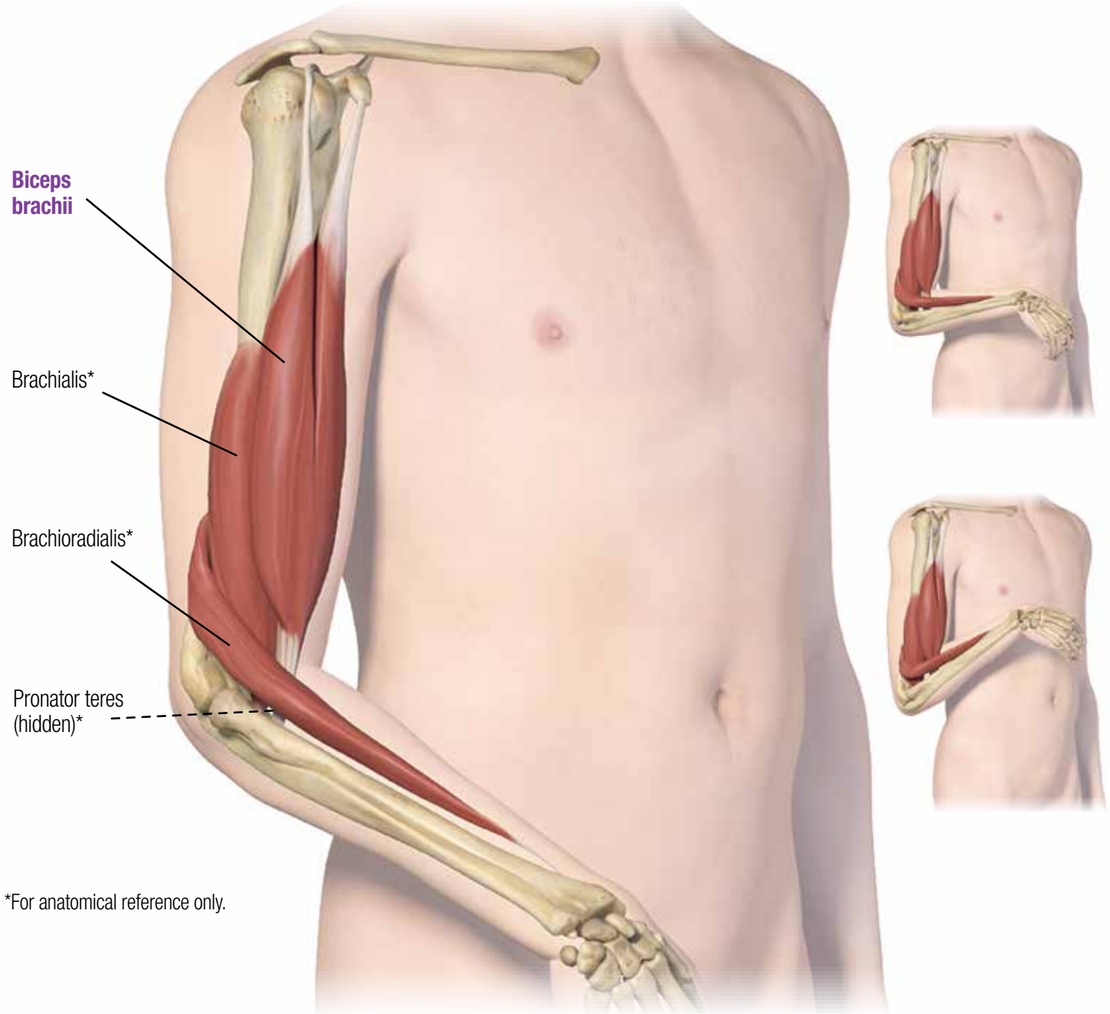
*Wrist, finger, and thumb flexors (adductor pollicis, flexor carpi radialis, flexor carpi ulnaris, flexor digitorum profundus, flexor digitorum sublimis, flexor pollicis longus) are hidden as they are more readily identified in the anterior compartment of the forearm, which is not visible in this illustration.

†For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Increased Risk of Clinically Significant Effects With Pre-existing Neuromuscular Disorders
Individuals with peripheral motor neuropathic diseases, amyotrophic lateral sclerosis (ALS), or neuromuscular junction disorders (eg, myasthenia gravis or Lambert-Eaton syndrome) should be monitored when given botulinum toxin.

Clinical presentation in upper limb (continued)

Flexed elbow, pronated forearm



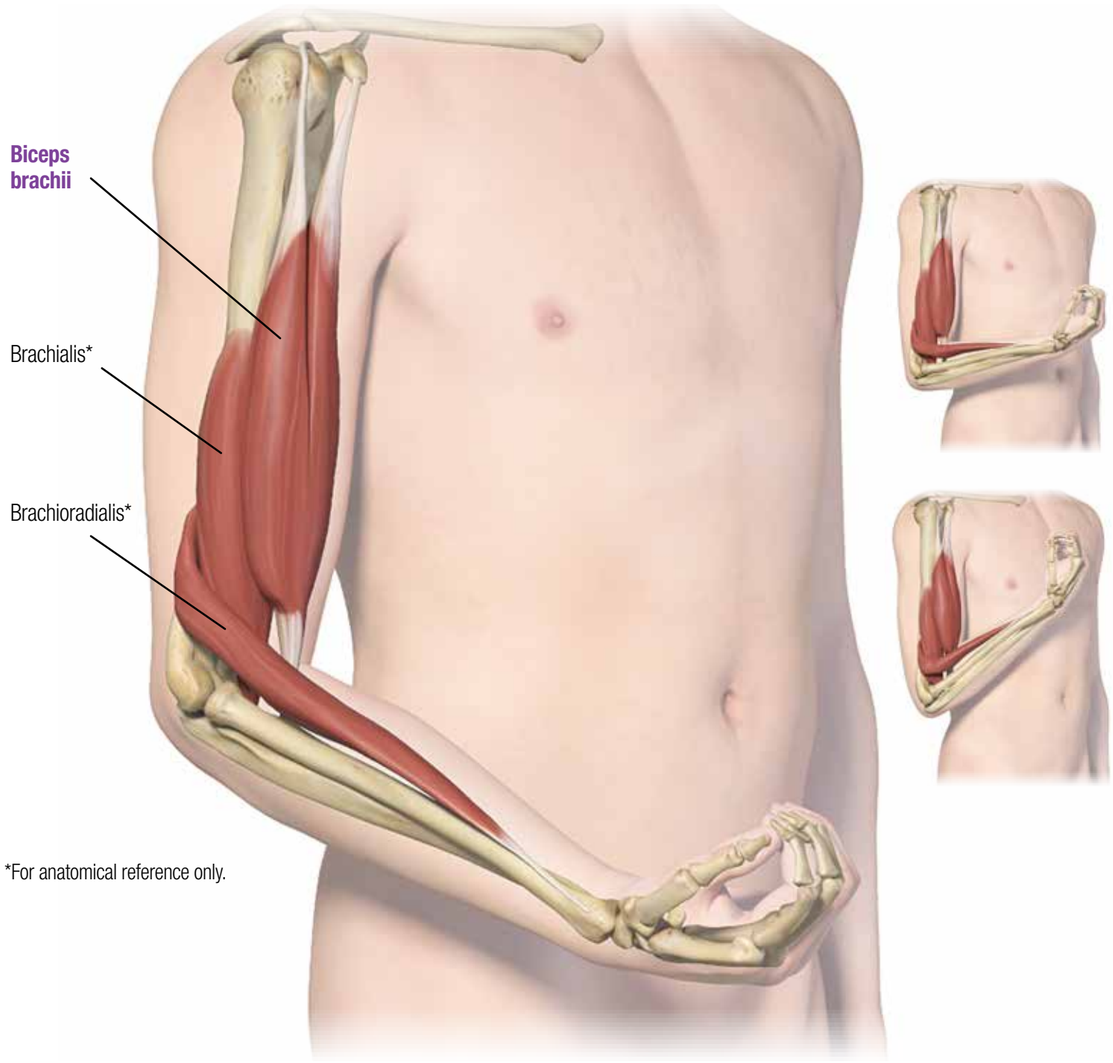
*For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Increased Risk of Clinically Significant Effects With Pre-existing Neuromuscular Disorders (continued)
Patients with known or unrecognized neuromuscular disorders or neuromuscular junction disorders may be at increased risk of clinically significant effects including generalized muscle weakness, diplopia, ptosis, dysphonia, dysarthria, severe dysphagia, and respiratory compromise from therapeutic doses of BOTOX® (see *Warnings and Precautions*).

Please see additional Important Safety Information about BOTOX® on following pages.

Clinical presentation in upper limb (continued)

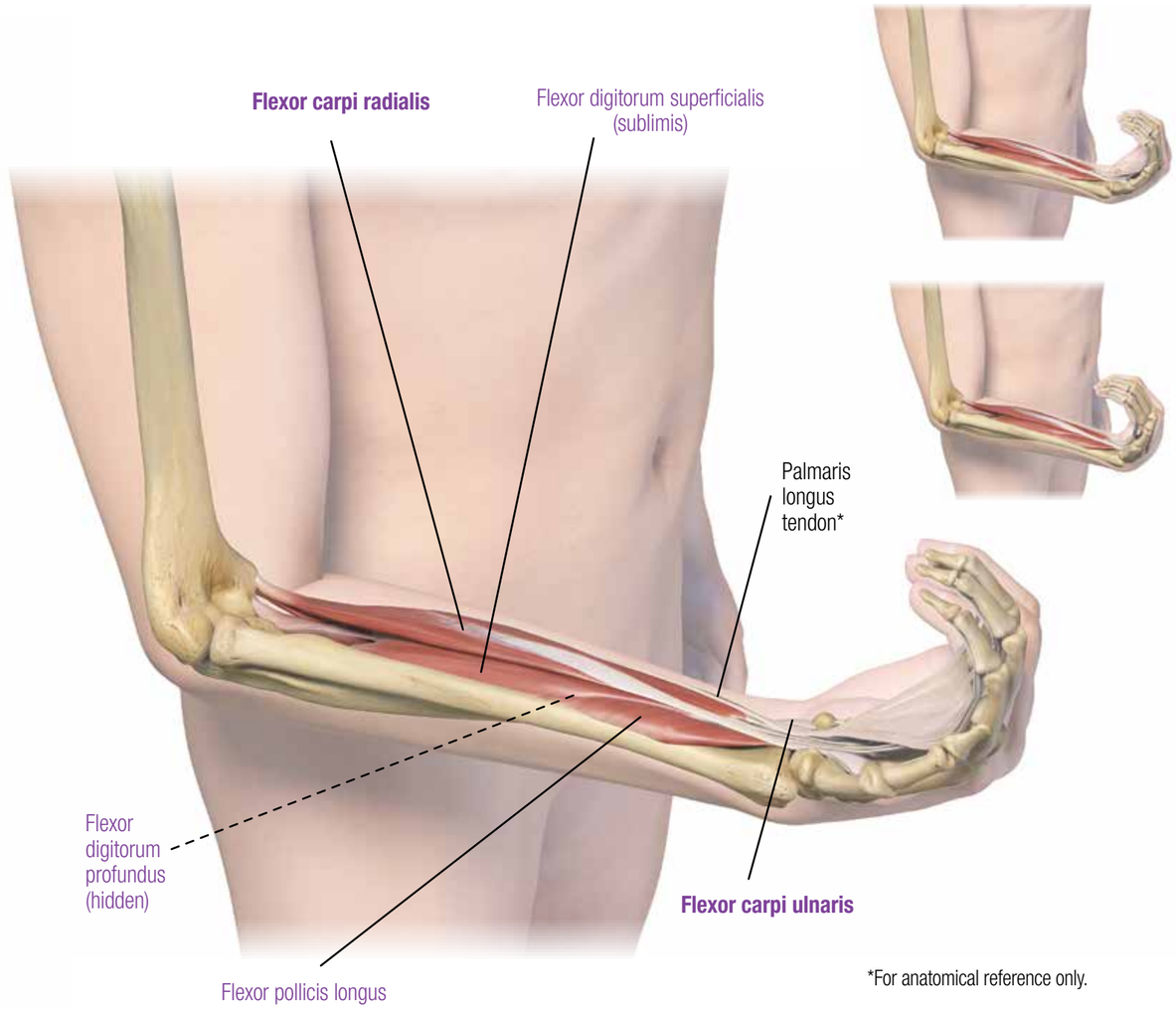
Flexed elbow, supinated forearm



*For anatomical reference only.

Clinical presentation in upper limb (continued)

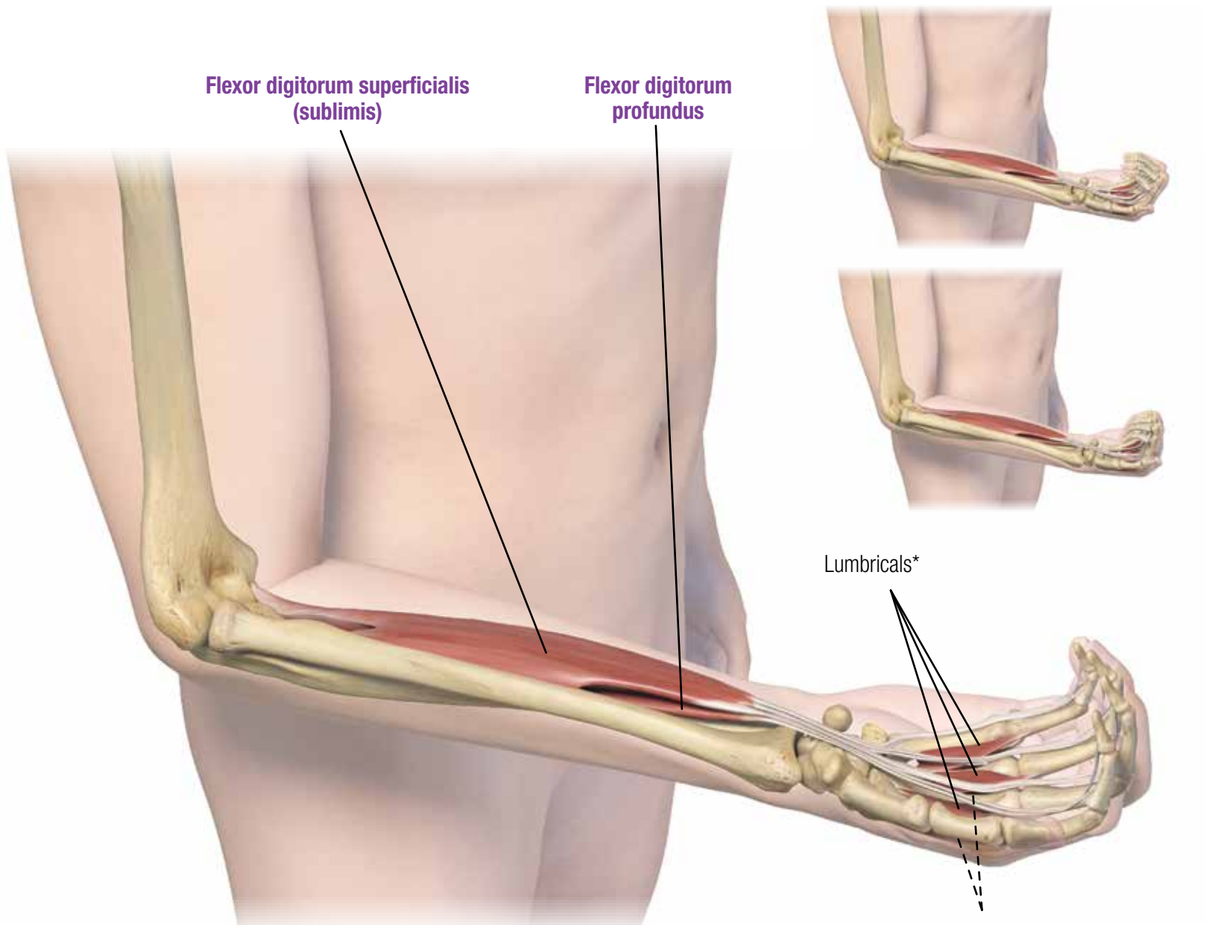
Flexed wrist



*For anatomical reference only.

Clinical presentation in upper limb (continued)

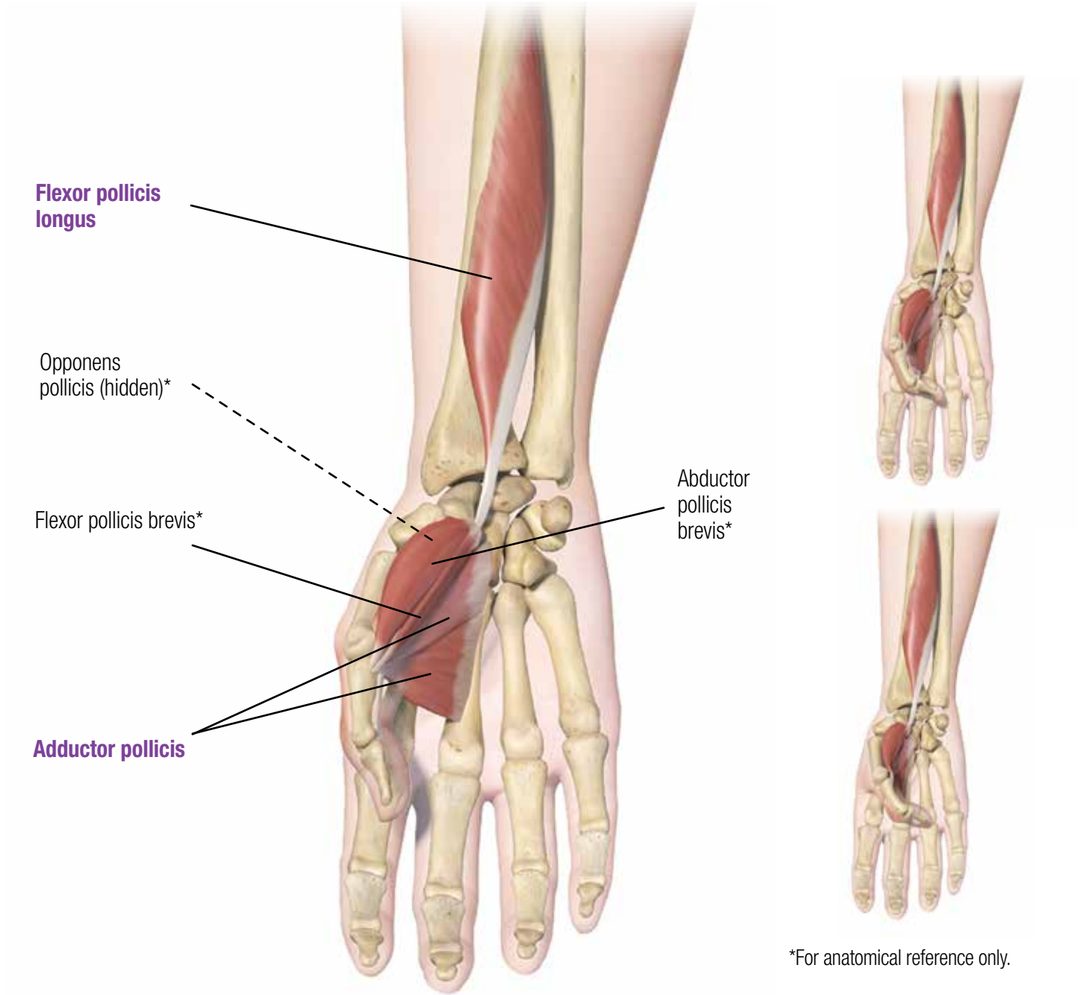
Flexed fingers



*For anatomical reference only.

Clinical presentation in upper limb (continued)

Thumb in palm



*For anatomical reference only.

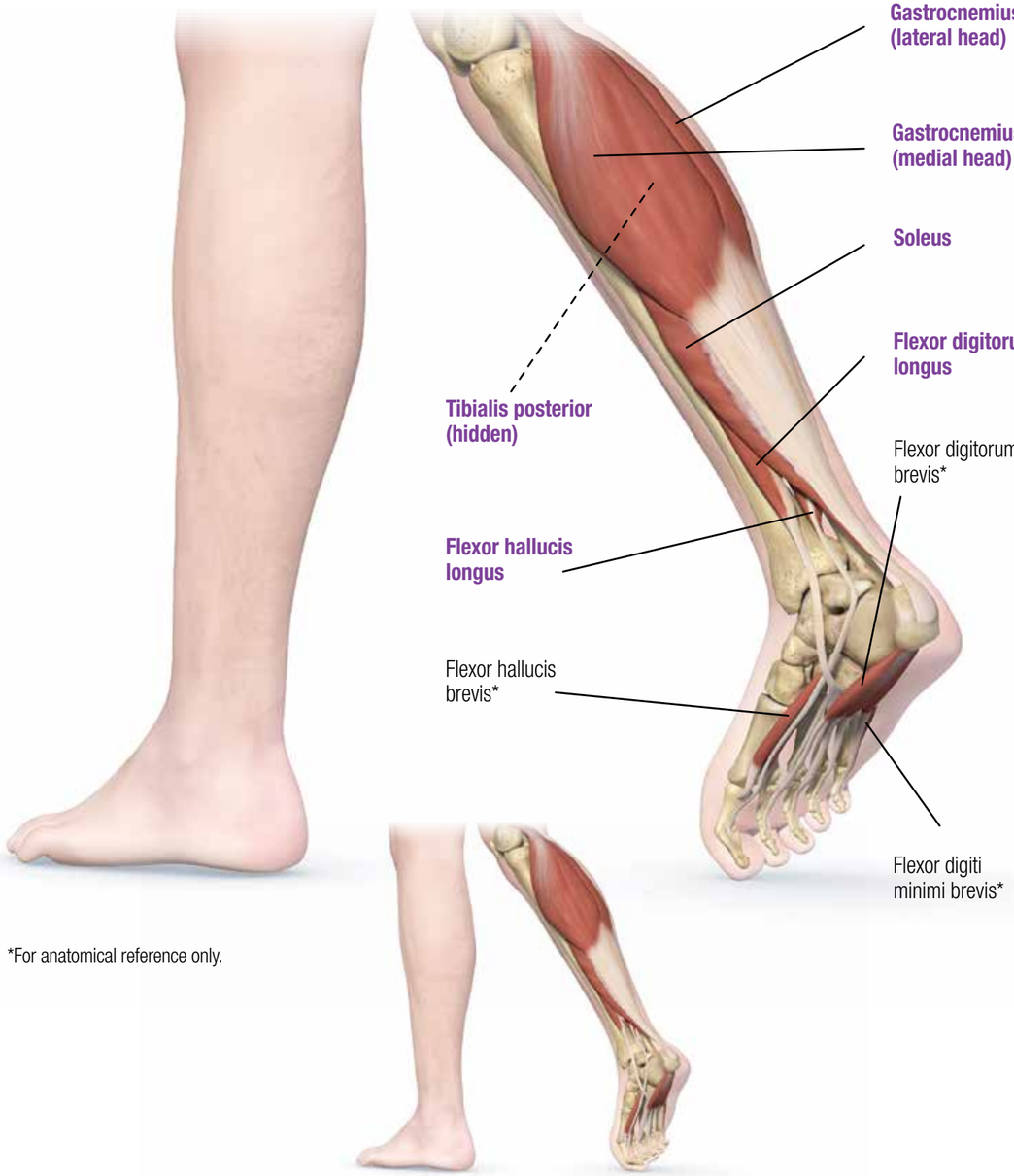
IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity
Bronchitis was reported more frequently as an adverse reaction in adult patients treated for upper limb spasticity with BOTOX® (3% at 251 Units to 360 Units total dose) compared to placebo (1%). In adult patients with reduced lung function treated for upper limb spasticity, upper respiratory tract infections were also reported more frequently as adverse reactions in patients treated with BOTOX® (11% at 360 Units total dose; 8% at 240 Units total dose) compared to placebo (6%).

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity (continued)
In adult patients treated for lower limb spasticity, upper respiratory tract infections were reported more frequently as an adverse reaction in patients treated with BOTOX® (2% at 300 Units to 400 Units total dose), compared to placebo (1%).

Please see additional Important Safety Information about BOTOX® on following pages.

Clinical presentation in lower limb

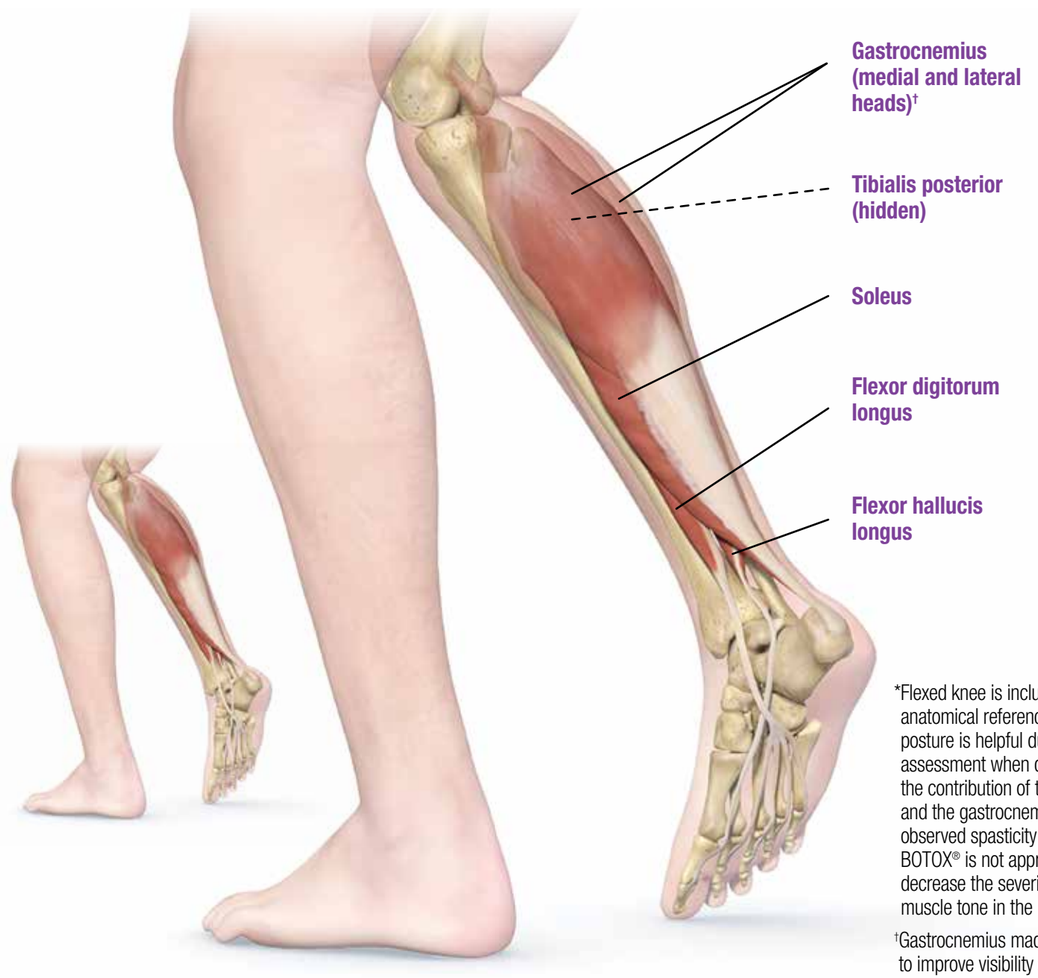
Flexed ankle, flexed toes



*For anatomical reference only.

Clinical presentation in lower limb (continued)

Flexed knee*, flexed ankle



*Flexed knee is included for anatomical reference only as this posture is helpful during patient assessment when determining the contribution of the soleus and the gastrocnemius to the observed spasticity in the ankle. BOTOX® is not approved to decrease the severity of increased muscle tone in the knee.

†Gastrocnemius made transparent to improve visibility of soleus.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

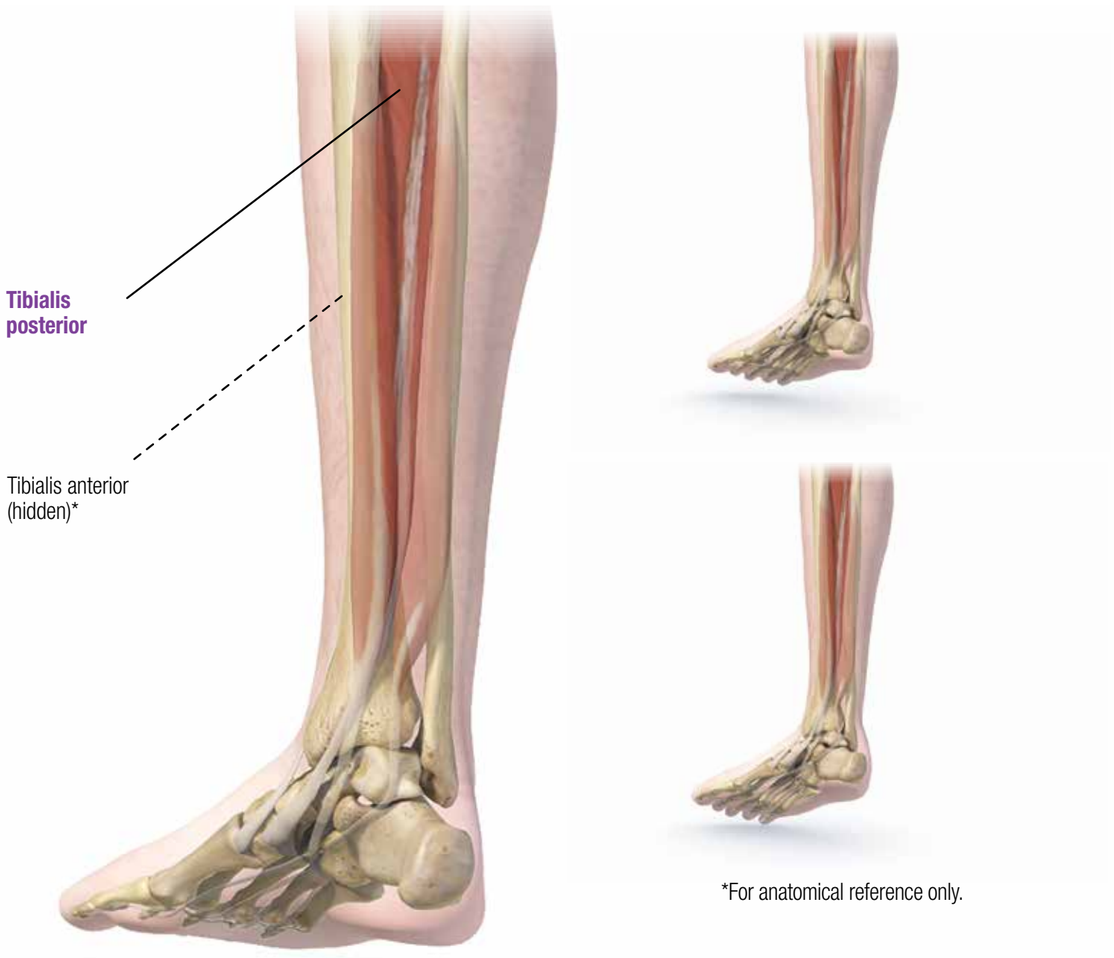
Human Albumin and Transmission of Viral Diseases

This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would also be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

Please see additional Important Safety Information about BOTOX® on following pages.

Clinical presentation in lower limb (continued)

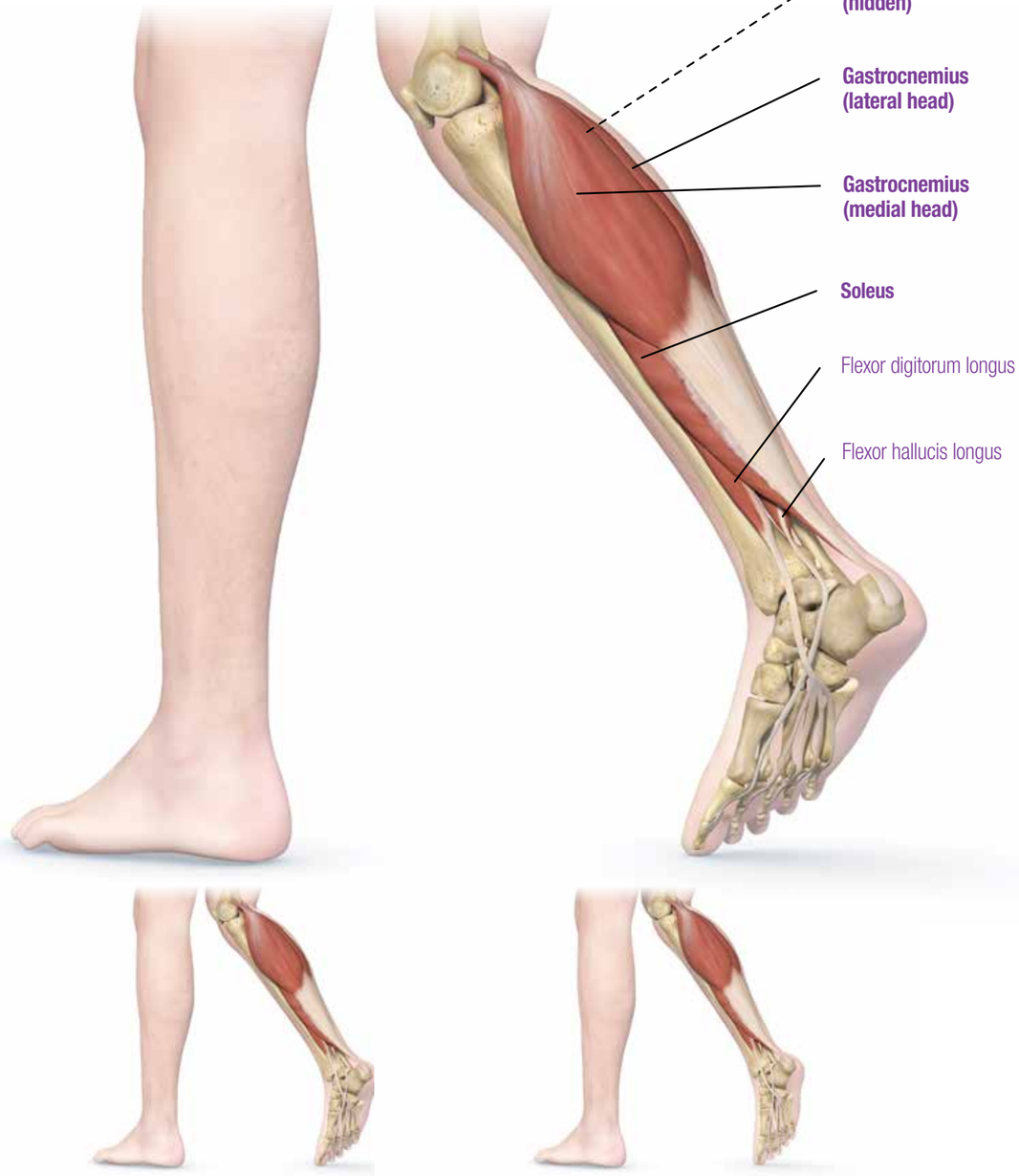
Inverted/supinated foot



*For anatomical reference only.

Clinical presentation in lower limb (continued)

Flexed ankle

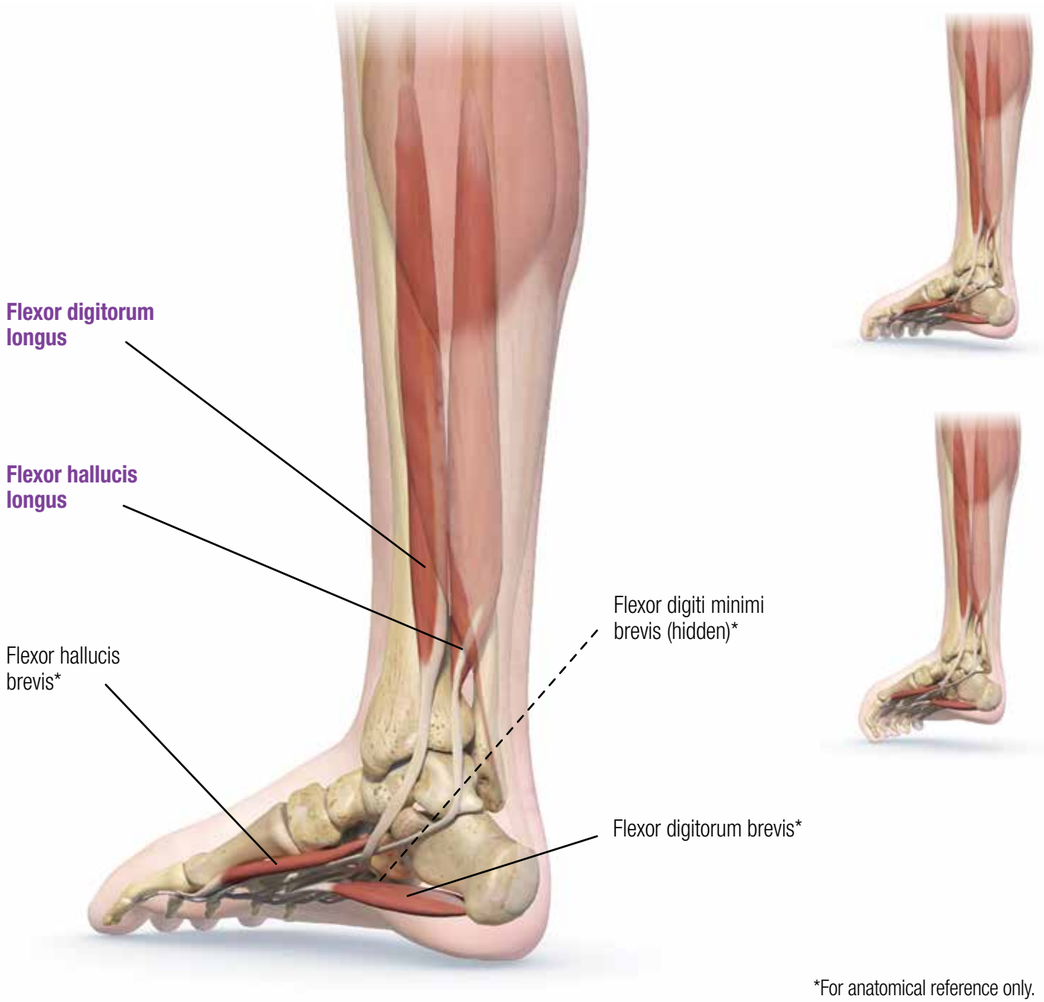


IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS
Adverse reactions to BOTOX® for injection are discussed in greater detail in the following sections: *Boxed Warning*, *Contraindications*, and *Warnings and Precautions*.

Please see additional Important Safety Information about BOTOX® on following pages.

Clinical presentation in lower limb (continued)

Flexed toes

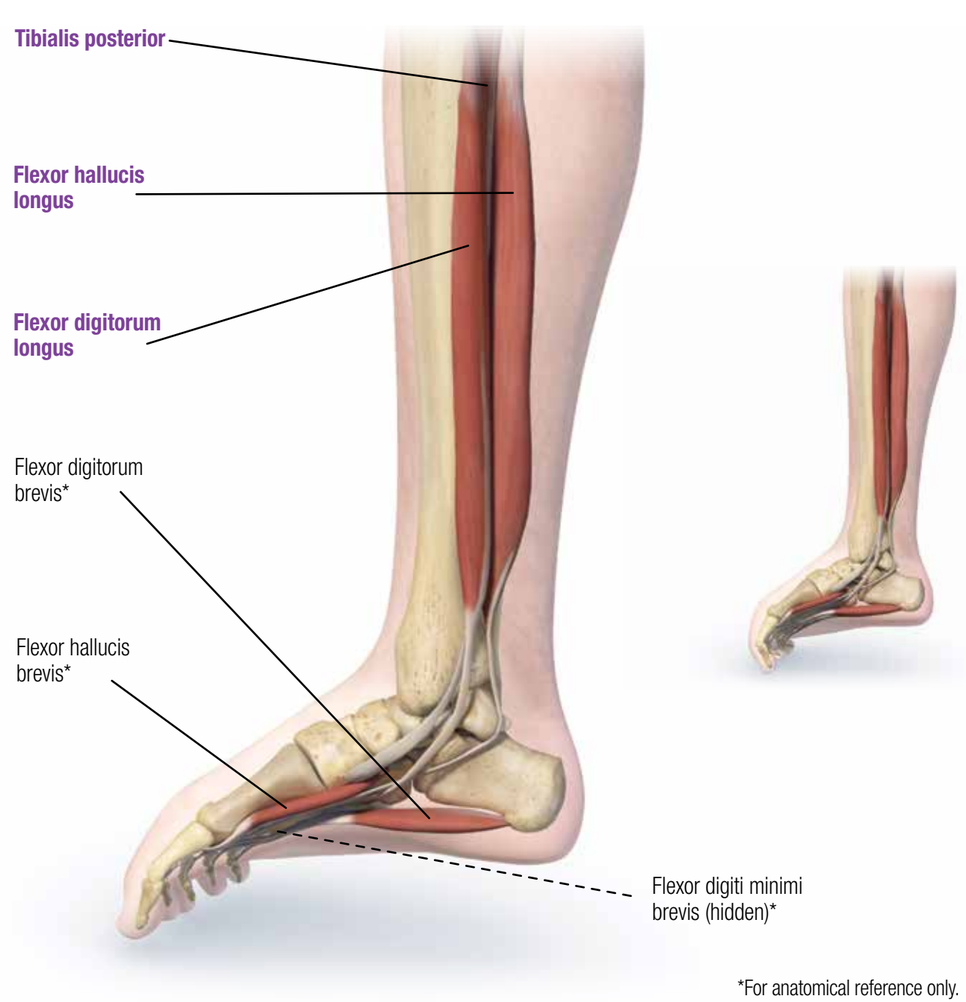


*For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Adult Upper Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for upper limb spasticity include pain in extremity, muscular weakness, fatigue, nausea, and bronchitis.

Clinical presentation in lower limb (continued)

Equinovarus foot, flexed toes



*For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Adult Lower Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for lower limb spasticity include arthralgia, back pain, myalgia, upper respiratory tract infection, and injection-site pain.

Please see additional Important Safety Information about BOTOX® on following pages.

Overview of the BOTOX® Treatment Framework

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Postmarketing Experience
Adverse reactions that have been identified during postapproval use of BOTOX® are discussed in greater detail in Postmarketing Experience (Section 6.3 of the Prescribing Information).

There have been spontaneous reports of death, sometimes associated with dysphagia, pneumonia, and/or other significant debility or anaphylaxis, after treatment with botulinum toxin. There have also been reports of adverse events involving the cardiovascular system, including arrhythmia and myocardial infarction, some with fatal outcomes. Some of these patients had risk factors including cardiovascular disease. The exact relationship of these events to the botulinum toxin injection has not been established.

Consider bringing the framework into your BOTOX® treatment strategy

The right goals

Establish specific and realistic goals to help guide the course of care

- Determine how BOTOX® fits into the overall treatment plan to help achieve these goals
- When using BOTOX®, it's important to **set expectations** to help ensure the patient **follows the treatment plan**

The right muscles/dose

Use patient goals and presenting postures/symptoms to help optimize muscle selection and select the appropriate BOTOX® dose

- **Identify muscles** contributing to the posture(s) and symptoms
- Isolate which muscles are most problematic and **should be targeted**, and at which dose

---

The right plan

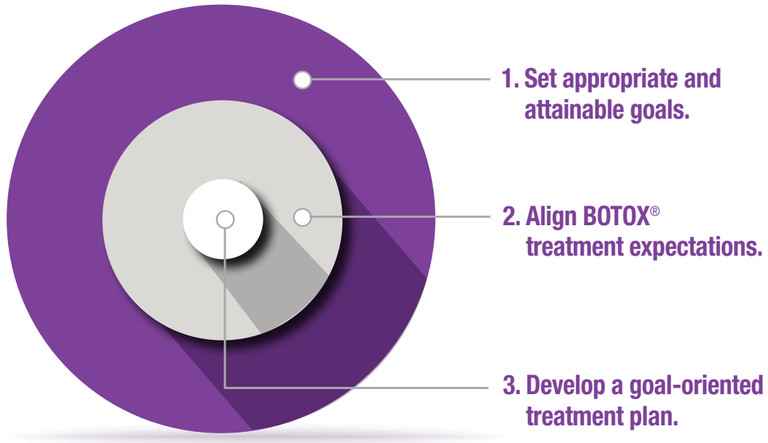
Establish a plan to re-evaluate the performance of BOTOX® over initial and subsequent treatment sessions

- **Every patient is different** and will respond to treatment differently
- Goals as well as muscles/dose selection **should be re-evaluated at each treatment**
- Based on patient treatment goals and response to previous treatment, an **adjustment in BOTOX® dose or injected muscles may be needed**

IMPORTANT SAFETY INFORMATION (continued)
DRUG INTERACTIONS
Co-administration of BOTOX® and other agents interfering with neuromuscular transmission (eg, aminoglycosides, curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. Use of anticholinergic drugs after administration of BOTOX® may potentiate systemic anticholinergic effects. The effect of administering different botulinum neurotoxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of BOTOX®.

Please see the accompanying BOTOX® full Prescribing Information including Boxed Warning and Medication Guide.

Take a strategic approach to treatment planning



Treatment-planning considerations

	Challenge[1,2]	Opportunity
Goal setting	Patients are often **misaligned** with their clinicians about treatment goals	Use a **structured process** to uncover and communicate individualized and realistic patient goals
Communication	Patients may **respond negatively** to words they find scary or too scientific	**Consider avoiding** phrases like “toxin,” “efficacy,” and “paralyze the muscle”
Cost/Patient perception	If treatment doesn’t meet expectations, patients may feel it’s **“not worth”** the out-of-pocket cost	Reinforce that it takes **time and effort** to see results, which may change their perception about BOTOX® treatment

Use the *SMART* process to streamline goal setting[3-17]

Specific

Set personalized goals that address what the patient is seeking to achieve

Measurable

Involve patients/caregivers with simple, quantifiable methods

Agreed-upon

Summarize and confirm that patients/caregivers understand the plan

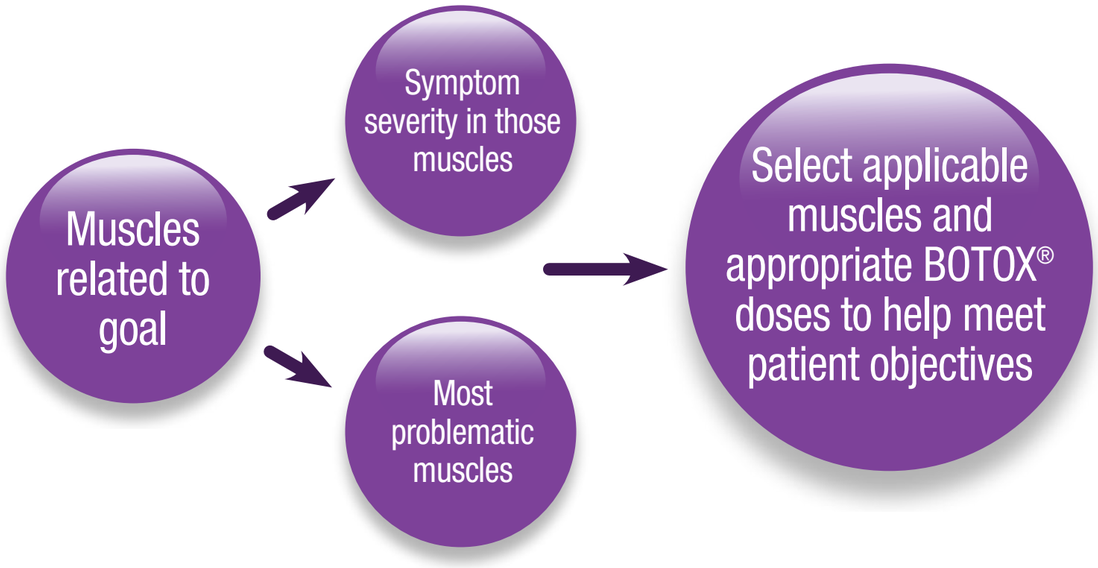
Realistic

Clearly communicate what the treatment plan can achieve

Time-based

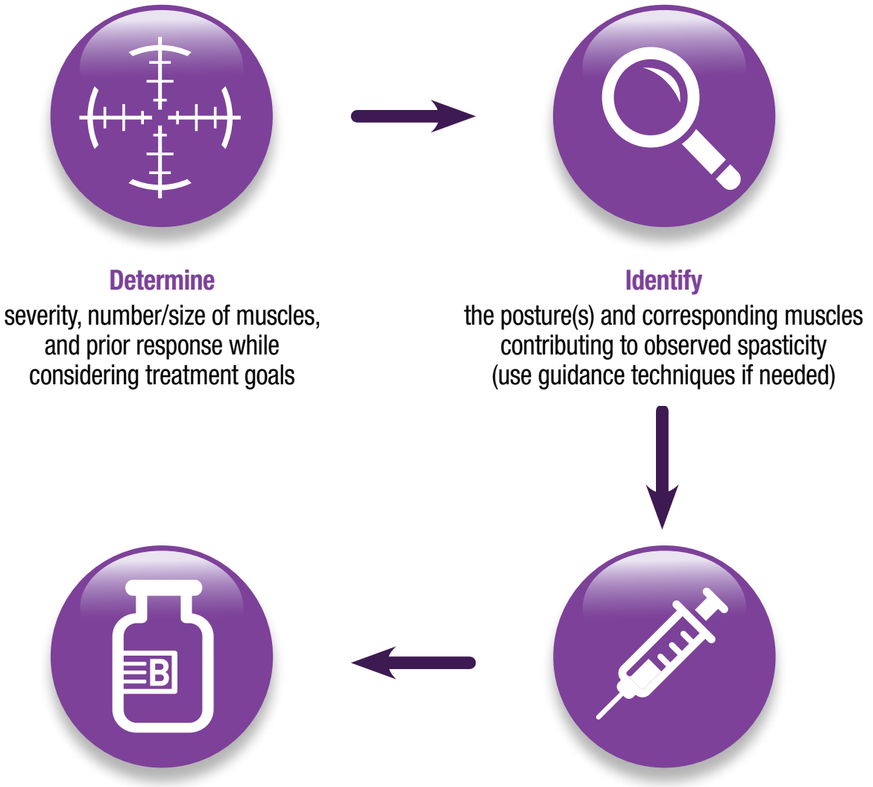
Establish distinct time frames about when the patient may expect results

Prioritize muscle/dose selection based on treatment goals



Adjust muscle/dose selections based on goal status and treatment response

Steps to use when selecting muscles/dose for injection



Determine
severity, number/size of muscles, and prior response while considering treatment goals

Identify
the posture(s) and corresponding muscles contributing to observed spasticity (use guidance techniques if needed)

Isolate
which muscles are the most problematic and should be targeted

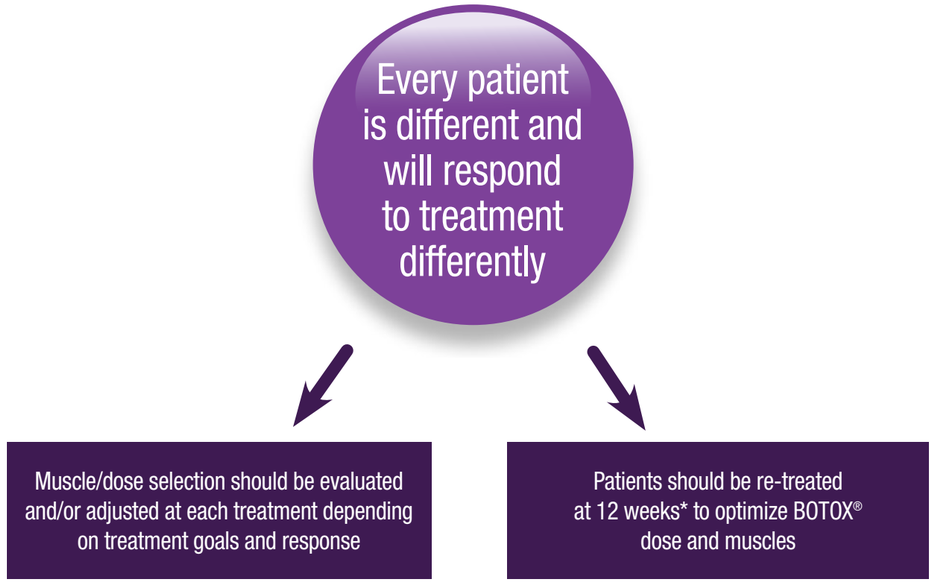
Select
the starting dose for each muscle

Dosing in initial and subsequent treatment sessions should be tailored to the individual based on the size, number, and location of muscles involved, severity of spasticity, the presence of local muscle weakness, the patient's response to previous treatment, or adverse event history with BOTOX®[18]

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use
Serious adverse reactions, including excessive weakness, dysphagia, and aspiration pneumonia, with some adverse reactions associated with fatal outcomes, have been reported in patients who received BOTOX® injections for unapproved uses. In these cases, the adverse reactions were not necessarily related to distant spread of toxin, but may have resulted from the administration of BOTOX® to the site of injection and/or adjacent structures. In several of the cases, patients had pre-existing dysphagia or other significant disabilities. There is insufficient information to identify factors associated with an increased risk for adverse reactions associated with the unapproved uses of BOTOX®. The safety and effectiveness of BOTOX® for unapproved uses have not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Key principles to setting up an effective treatment plan



Treatment-planning considerations

	Challenge[1,2]	Opportunity
The role of BOTOX®	**Patients should understand** that BOTOX® is part of a larger treatment plan	Educate patients about **the importance of adhering** to PT/OT, orthoses, oral therapies, etc
Follow-up	Patients can benefit from learning that their BOTOX® treatment plan is an **ongoing process** and may evolve over time	Educate patients that at each follow-up and treatment appointment, you'll **assess progress** and **make adjustments** as needed
Reviewing progress	Patients may not have an established role in **tracking their treatment progress**	Encourage patients to use **simple, quantifiable methods** to track their progress and communicate it at every appointment

*Patients should be considered for reinjection when the clinical effect of the previous injection has diminished but no sooner than 12 weeks from the previous injection.

Monitor goals and treatment response across multiple BOTOX® sessions

Treatment 1

Ensure patient goals are manifested in realistic expectations and an adequate treatment approach

4- to 6-week follow-up

Discuss response to treatment and point out improvements

Future treatments

Check on goals and determine if adjustments are needed

Help patients understand that their plan may include multiple BOTOX® treatments

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Hypersensitivity Reactions
Serious and/or immediate hypersensitivity reactions have been reported. These reactions include anaphylaxis, serum sickness, urticaria, soft-tissue edema, and dyspnea. If such a reaction occurs, further injection of BOTOX® should be discontinued and appropriate medical therapy immediately instituted. One fatal case of anaphylaxis has been reported in which lidocaine was used as the diluent, and consequently the causal agent cannot be reliably determined.

Please see additional Important Safety Information about BOTOX® on following pages.

Muscles by posture in Adult Spasticity

Posture	Muscles	
	Upper limb spasticity[18,19]	
Pronated flexed elbow	• Biceps brachii • Brachialis*	• Brachioradialis* • Pronator teres*
Supinated flexed elbow	• Biceps brachii • Brachialis*	• Brachioradialis*
Flexed wrist	• Flexor carpi radialis • Flexor carpi ulnaris • Flexor digitorum profundus	• Flexor digitorum superficialis (sublimis) • Flexor pollicis longus • Palmaris longus*
Flexed fingers	• Flexor digitorum profundus • Flexor digitorum superficialis (sublimis)	• Interossei* • Lumbricals*
Thumb in palm	• Abductor pollicis brevis* • Adductor pollicis • Flexor pollicis brevis*	• Flexor pollicis longus • Opponens pollicis*
	Lower limb spasticity[18,19]	
Flexed ankle	• Flexor digitorum longus • Flexor hallucis longus • Tibialis Posterior	• Gastrocnemius • Soleus
Flexed toes	• Flexor digitorum longus • Flexor digiti minimi brevis* • Flexor digitorum brevis*	• Flexor hallucis longus • Flexor hallucis brevis*
Inverted/supinated foot	• Tibialis anterior*	• Tibialis posterior

*For anatomical reference only.

Prioritize which muscles/dose to inject based on the established treatment goals

Injection insights and considerations

General considerations

- The recommended dilution rate for Adult Spasticity is 2:1, meaning put 4 mL of saline into a 200-Unit vial or 2 mL into a 100-Unit vial
- Evaluate the anatomy, including relevant function and the effects of treatment on these muscles (eg, reducing tone), when considering muscle and dose selection
- Recognize the impact of spasticity on the anatomy, as no 2 patients are alike; muscles may be hypertrophied or atrophied, so thorough assessment of the spastic muscles is critical at each injection cycle
- Utilize guidance techniques to ensure proper needle placement
  - Accurate needle guidance is necessary to ensure proper muscle selection
  - When using E-Stim on hyperflexed muscles, passively extend the muscle to allow for flexion
- Talk patients through the injection session step by step, explaining what they may experience (see, hear, and/or feel)
  - For example: “You are going to feel pressure”, “Now a stick and a little burning”, “Okay, now we are going to move on to the next injection site”, etc

This information provides suggestions and considerations for injection training but does not constitute professional medical advice.

Injection insights and considerations (continued)

Before injection

- Examine the patient to identify the muscles contributing to the posture(s) and spasticity
  - Isolate the involved muscles using a clinical exam as well as guidance techniques
- Verify the needle is securely fastened to the injection syringe
- Consider the type of needle/syringe to minimize the chance of the needle popping out during the injection
- Consider using *Luer-Lok*® syringes to prevent the leakage of BOTOX® during the injection
- Consider lining up the bevel of the needle with the gradations on the syringe so the bevel is facing upward; this will help you read the syringe when injecting
- Consider discussing the option of using cold spray to numb the injection site(s) with your patients
- Explain that some injection sites may be more sensitive than others so the pain level can vary with each injection

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Dysphagia and Breathing Difficulties

Treatment with BOTOX® and other botulinum toxin products can result in swallowing or breathing difficulties. Patients with pre-existing swallowing or breathing difficulties may be more susceptible to these complications. In most cases, this is a consequence of weakening of muscles in the area of injection that are involved in breathing or oropharyngeal muscles that control swallowing or breathing (see *Boxed Warning*).

Pulmonary Effects of BOTOX® in Patients With Compromised Respiratory Status Treated for Spasticity

Patients with compromised respiratory status treated with BOTOX® for adult spasticity should be monitored closely.

Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity

Bronchitis was reported more frequently as an adverse reaction in adult patients treated for upper limb spasticity with BOTOX® (3% at 251 Units to 360 Units total dose) compared to placebo (1%). In adult patients with reduced lung function treated for upper limb spasticity, upper respiratory tract infections were also reported more frequently as adverse reactions in patients treated with BOTOX® (11% at 360 Units total dose; 8% at 240 Units total dose) compared to placebo (6%). In adult patients treated for lower limb spasticity, upper respiratory tract infections were reported more frequently as an adverse reaction in patients treated with BOTOX® (2% at 300 Units to 400 Units total dose), compared to placebo (1%).

Injection insights and considerations (continued)

During injection

- An assistant may be helpful to position the patient's spastic limb and maintain stability during the injection
- Hold the skin at the injection site taut, if possible. Loose skin is more difficult to puncture
- It may be helpful to hold the hub of the needle with 1 hand like a pencil to ensure better control of the syringe
- Aspirate to ensure no blood return
- Consider performing all injections perpendicular to the skin, if possible, to most readily access the muscles involved
  - To optimally target the muscle, consider angulation of the injection needle and patient's limb position
- Insert the needle into the targeted muscle with consistent pressure to reduce pain at the injection site

This information provides suggestions and considerations for injection training but does not constitute professional medical advice.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Human Albumin and Transmission of Viral Diseases

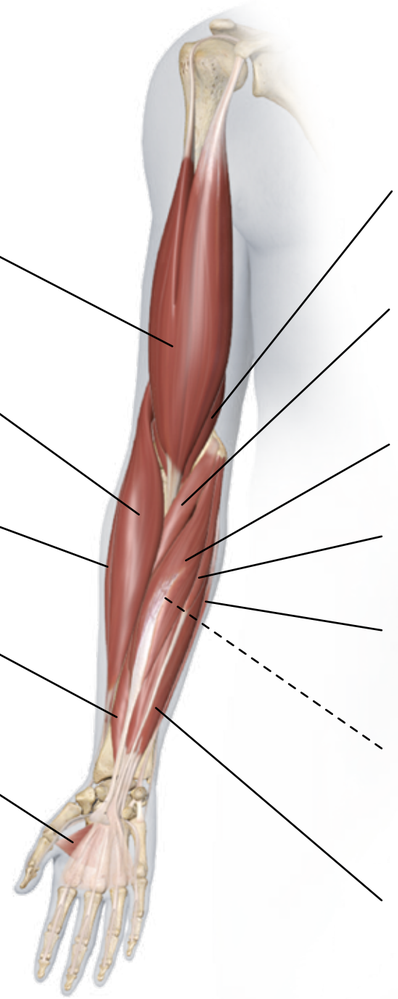
This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would also be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

Please see additional Important Safety Information about BOTOX® on following pages.

Main muscles involved in Adult Upper Limb Spasticity

Muscles listed in purple are those approved for BOTOX® injection[18]

Anterior view



Biceps Brachii
100 Units to 200 Units divided in 4 sites

Brachialis*

Brachioradialis*

Pronator Teres*

Flexor Carpi Radialis
12.5 Units to 50 Units in 1 site

Extensor Carpi Radialis Longus*

Palmaris Longus*

Flexor Pollicis Longus
20 Units in 1 site

Flexor Carpi Ulnaris
12.5 Units to 50 Units in 1 site

Adductor Pollicis
20 Units in 1 site

Flexor Digitorum Profundus (hidden)
30 Units to 50 Units in 1 site

Flexor Digitorum Superficialis (Sublimis)
30 Units to 50 Units in 1 site

*For anatomical reference only. Lines indicate muscle location, and do not point out sites for injection.

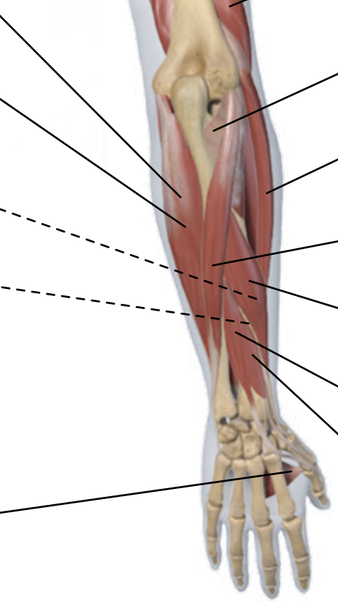
IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS
Adverse reactions to BOTOX® for injection are discussed in greater detail in the following sections: *Boxed Warning*, *Contraindications*, and *Warnings and Precautions*.

Please see additional Important Safety Information about BOTOX® on following pages.

Approved Muscles Involved in Common Postures

Elbow Flexors	Wrist Flexors	Finger Flexors	Thumb Flexors
Biceps Brachii	Flexor Carpi Radialis	Flexor Digitorum Profundus	Adductor Pollicis
	Flexor Carpi Ulnaris	Flexor Digitorum Superficialis (Sublimis)	Flexor Pollicis Longus

Posterior view



Biceps Brachii
100 Units to 200 Units divided in 4 sites

Brachialis*

Flexor Carpi Ulnaris
12.5 Units to 50 Units in 1 site

Brachioradialis*

Flexor Digitorum Profundus
30 Units to 50 Units in 1 site

Supinator*

Flexor Pollicis Longus (hidden)
20 Units in 1 site

Extensor Carpi Radialis Longus*

Flexor Digitorum Superficialis (Sublimis) (hidden)
30 Units to 50 Units in 1 site

Extensor Carpi Ulnaris*

Abductor Pollicis Longus*

Extensor Pollicis Longus*

Adductor Pollicis
20 Units in 1 site

Extensor Pollicis Brevis*

*For anatomical reference only. Lines indicate muscle location, and do not point out sites for injection.

Biceps brachii

▶ **BOTOX® dose: 100 Units to 200 Units divided in 4 sites**

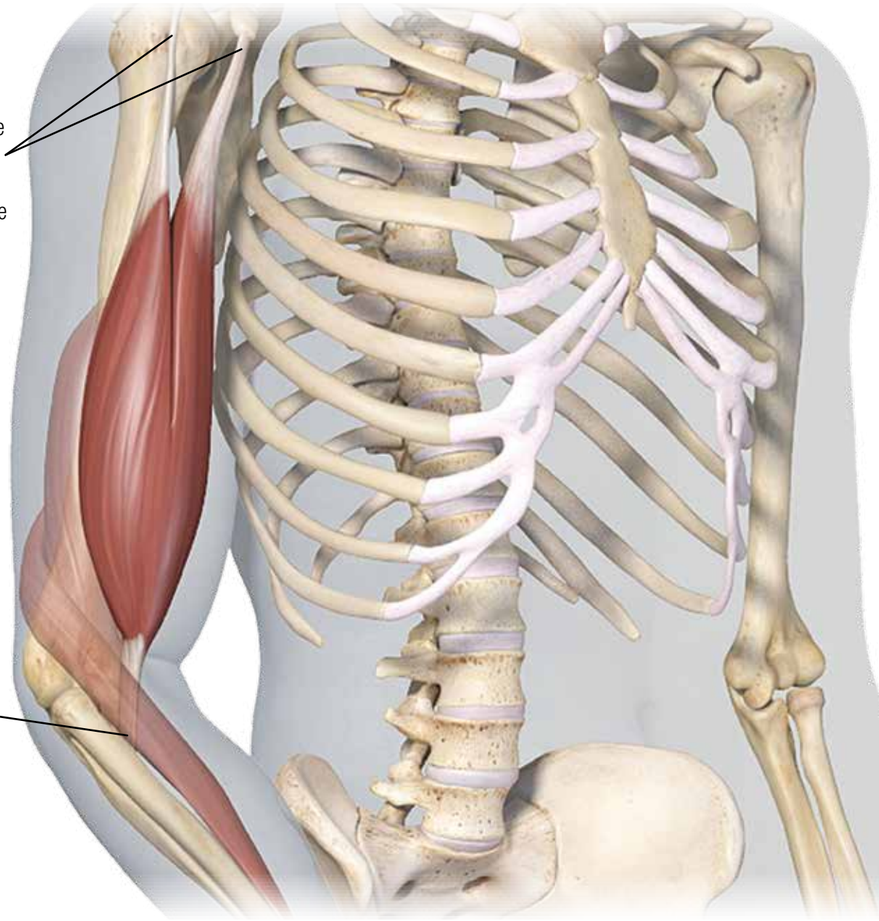
Muscle action[19]

Supinates the forearm and flexes the elbow

Proximal attachments

Long head arises from the supraglenoid tubercle of the scapula

Short head arises from the coracoid process



Distal attachment

Radial tuberosity

Other muscles involved in elbow flexion/forearm supination

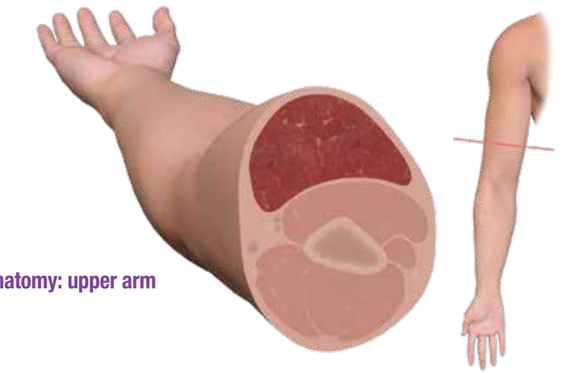
- Brachialis (flexion only)*
- Supinator (supination only)*
- Brachioradialis (flexion only)*

*For anatomical reference only.

Biceps brachii (continued)

Localization[20]

The biceps brachii is located in the anterior surface of the midarm.



Cross-sectional anatomy: upper arm

IMPORTANT SAFETY INFORMATION (continued)

ADVERSE REACTIONS (continued)

Adult Upper Limb Spasticity

The most frequently reported adverse reactions following injection of BOTOX® for upper limb spasticity include pain in extremity, muscular weakness, fatigue, nausea, and bronchitis.

Please see additional Important Safety Information about BOTOX® on following pages.

Biceps brachii (continued)

Injection considerations

- Extend the forearm, if possible, and approach the muscle through the anterior aspect of the biceps to avoid the vascular areas
- Consider using an inverted V pattern at the junction of the middle and lower third of the muscle when injecting the 4 sites
- Biceps muscles may be thinner in some individuals

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Adult Lower Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for lower limb spasticity include arthralgia, back pain, myalgia, upper respiratory tract infection, and injection-site pain.

Please see additional Important Safety Information about BOTOX® on following pages.

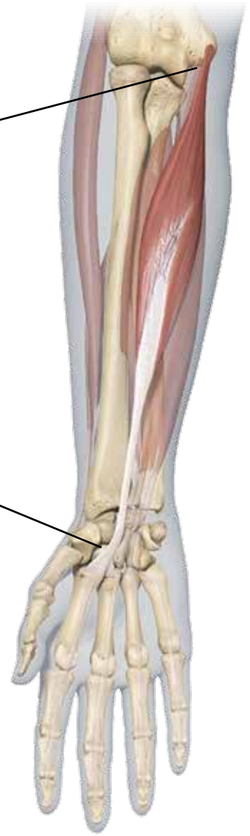
Notes

Flexor carpi radialis

▶ **BOTOX® dose: 12.5 Units to 50 Units (1 site)**

Muscle action[19]

Flexes the wrist and also abducts (radially deviates) the hand



Proximal attachment

Medial epicondyle via the common flexor tendon

Distal attachment

Palmar surface of the base of the second metacarpal

Other muscles involved in wrist flexion/abduction

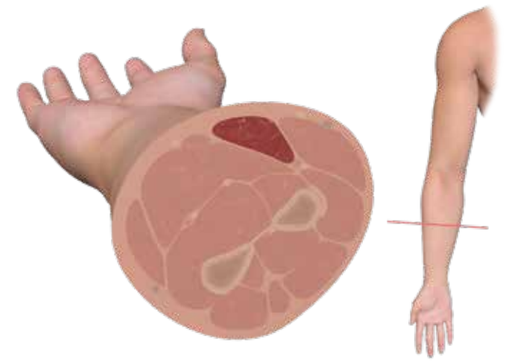
- Flexor carpi ulnaris (flexion only)
- Flexor digitorum superficialis (flexion only)
- Flexor digitorum profundus (flexion only)
- Flexor pollicis longus (flexion only)
- Palmaris longus (flexion only)*
- Extensor carpi radialis longus (abduction only)*
- Abductor pollicis longus (abduction only)*
- Extensor pollicis longus (abduction only)[21,*]

*For anatomical reference only.

Flexor carpi radialis (continued)

Localization[20]

Cross-sectional anatomy: forearm



The flexor carpi radialis can be located 3 to 4 fingerbreadths down from a line connecting the medial epicondyle and biceps tendon.

*For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)

Postmarketing Experience

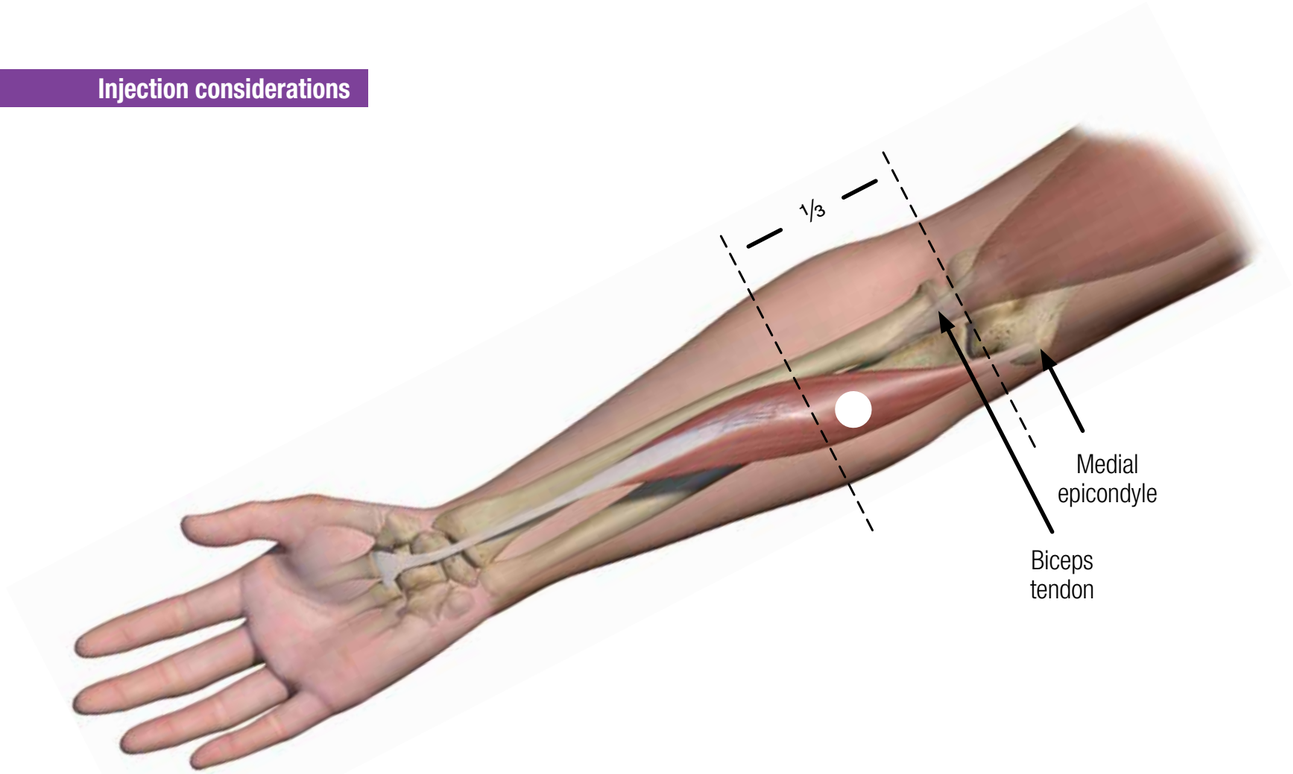
Adverse reactions that have been identified during postapproval use of BOTOX® are discussed in greater detail in Postmarketing Experience (Section 6.3 of the Prescribing Information).

There have been spontaneous reports of death, sometimes associated with dysphagia, pneumonia, and/or other significant debility or anaphylaxis, after treatment with botulinum toxin. There have also been reports of adverse events involving the cardiovascular system, including arrhythmia and myocardial infarction, some with fatal outcomes. Some of these patients had risk factors including cardiovascular disease. The exact relationship of these events to the botulinum toxin injection has not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor carpi radialis (continued)

Injection considerations



- If possible, place the forearm in a neutral position, put 1 finger on the bicep tendon and 1 finger on the medial epicondyle, bisect the line, and palpate the muscle with passive flexion
- Consider injecting in the proximal 1/3 of the forearm, in the largest part of the muscle
  - If you are in the mid forearm, you may be in the wrong muscle
- Avoid going too deep to avoid inadvertent injection of neighboring muscles

IMPORTANT SAFETY INFORMATION (continued)
DRUG INTERACTIONS
Co-administration of BOTOX® and other agents interfering with neuromuscular transmission (eg, aminoglycosides, curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. Use of anticholinergic drugs after administration of BOTOX® may potentiate systemic anticholinergic effects. The effect of administering different botulinum neurotoxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of BOTOX®.

Please see the accompanying BOTOX® full Prescribing Information including Boxed Warning and Medication Guide.

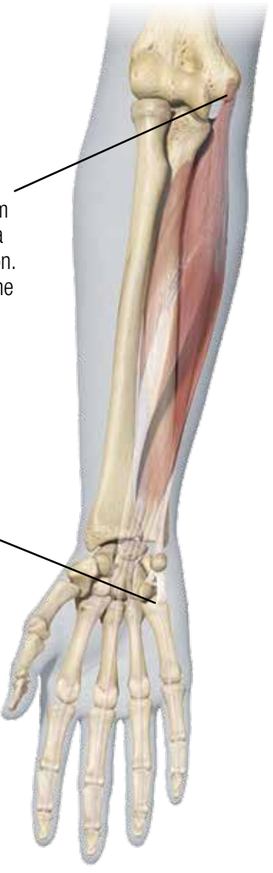
Notes

Flexor carpi ulnaris

▶ **BOTOX® dose: 12.5 Units to 50 Units (1 site)**

Muscle action[19]

Flexes the wrist and also adducts (ulnarly deviates) the hand



Proximal attachment

Humeral head arises from the medial epicondyle via the common flexor tendon. Ulnar head arises from the olecranon and proximal two-thirds of the ulna

Distal attachment

To the pisiform and further to the hamate and fifth metacarpal by pisohamate and pisometacarpal ligaments

Other muscles involved in wrist flexion/adduction

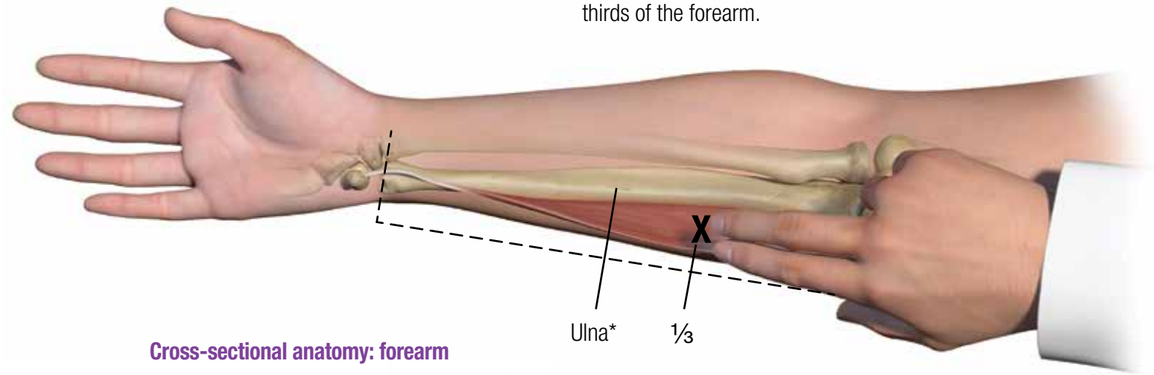
- Flexor carpi radialis (flexion only)
- Flexor digitorum profundus (flexion only)
- Flexor digitorum superficialis (flexion only)
- Flexor pollicis longus (flexion only)
- Palmaris longus (flexion only)*
- Extensor carpi ulnaris (adduction only)*

*For anatomical reference only.

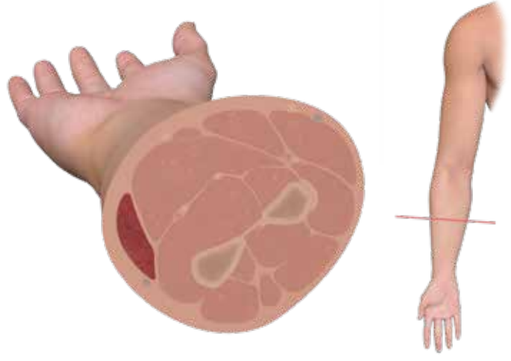
Flexor carpi ulnaris (continued)

Localization[20]

The flexor carpi ulnaris can be located 2 fingerbreadths volar to ulna at the junction of the upper and middle thirds of the forearm.



Cross-sectional anatomy: forearm



*For anatomical reference only.

IMPORTANT SAFETY INFORMATION (continued)

CONTRAINDICATIONS

BOTOX® is contraindicated in the presence of infection at the proposed injection site(s) and in patients who are hypersensitive to any botulinum toxin product or to any of the components in the formulation.

WARNINGS AND PRECAUTIONS

Spread of Toxin Effect

See Boxed Warning.

Lack of Interchangeability Between Botulinum Toxin Products

The potency Units of BOTOX® are specific to the preparation and assay method utilized. They are not interchangeable with other preparations of botulinum toxin products and, therefore, Units of biological activity of BOTOX® cannot be compared to nor converted into Units of any other botulinum toxin products assessed with any other specific assay method.

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor carpi ulnaris (continued)

Injection considerations

- If possible, position the limb in a comfortable position and localize using 2 fingerbreadths volar to the ulna
- Consider targeting the injection site in the ulnar portion of the volar forearm
- This muscle is very thin and superficial, so be aware of the surrounding nerves, arteries, and veins that are in the trajectory of the needle path

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use
Serious adverse reactions, including excessive weakness, dysphagia, and aspiration pneumonia, with some adverse reactions associated with fatal outcomes, have been reported in patients who received BOTOX® injections for unapproved uses. In these cases, the adverse reactions were not necessarily related to distant spread of toxin, but may have resulted from the administration of BOTOX® to the site of injection and/or adjacent structures. In several of the cases, patients had pre-existing dysphagia or other significant disabilities. There is insufficient information to identify factors associated with an increased risk for adverse reactions associated with the unapproved uses of BOTOX®. The safety and effectiveness of BOTOX® for unapproved uses have not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

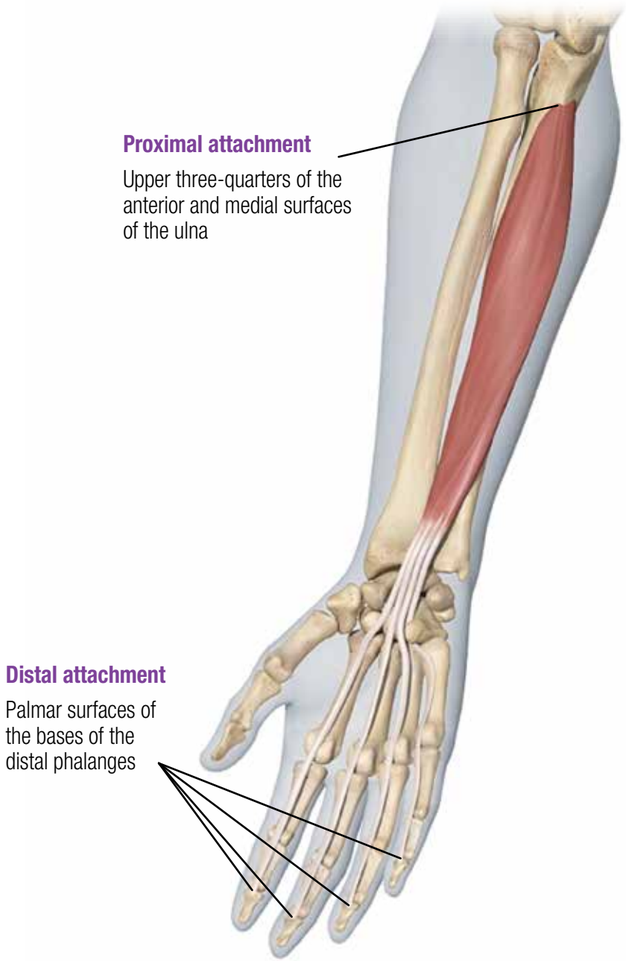
Notes

Flexor digitorum profundus

▶ **BOTOX® dose: 30 Units to 50 Units (1 site)**

Muscle action[19]

Primarily finger flexion (only muscle capable of flexing the distal interphalangeal joints), but can also flex any or all of the joints over which it passes



IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Hypersensitivity Reactions

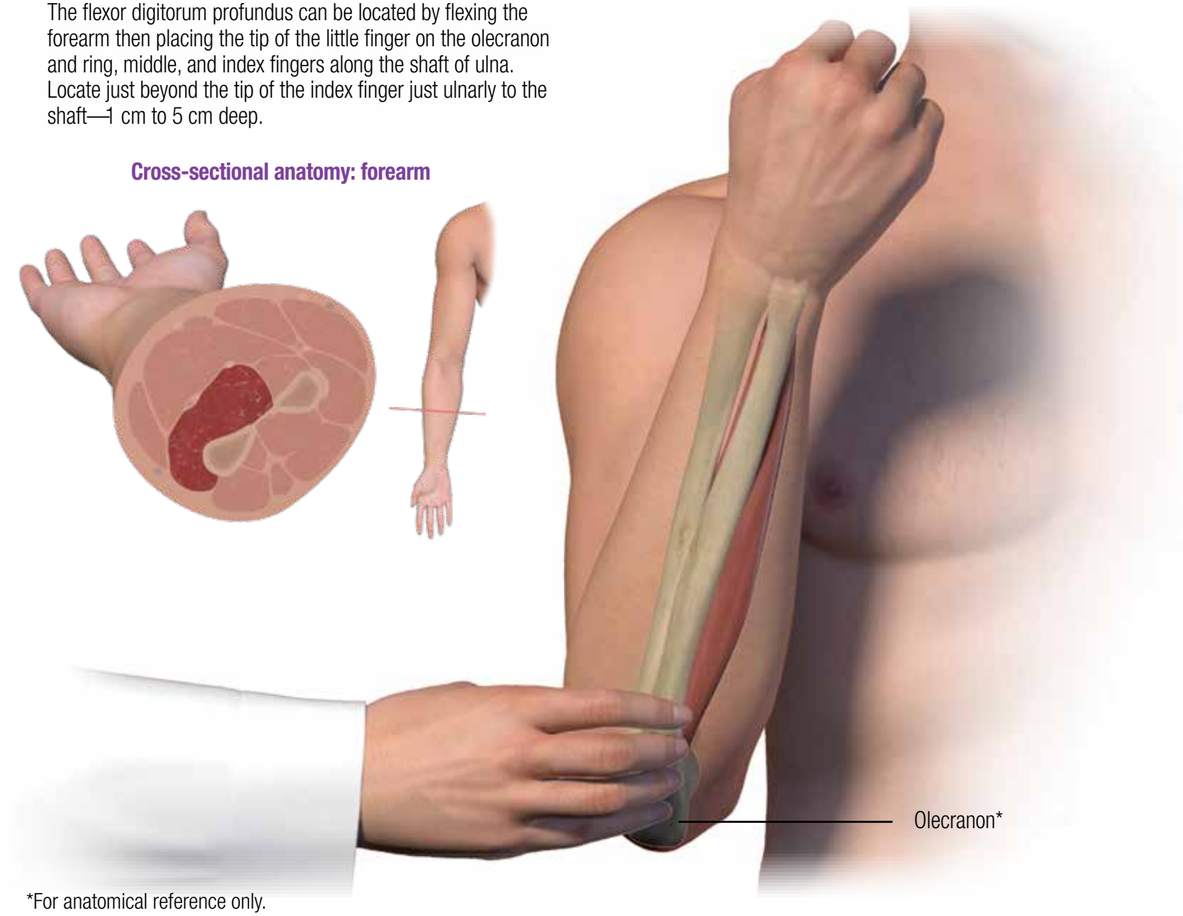
Serious and/or immediate hypersensitivity reactions have been reported. These reactions include anaphylaxis, serum sickness, urticaria, soft-tissue edema, and dyspnea. If such a reaction occurs, further injection of BOTOX® should be discontinued and appropriate medical therapy immediately instituted. One fatal case of anaphylaxis has been reported in which lidocaine was used as the diluent, and consequently the causal agent cannot be reliably determined.

Flexor digitorum profundus (continued)

Localization[20]

The flexor digitorum profundus can be located by flexing the forearm then placing the tip of the little finger on the olecranon and ring, middle, and index fingers along the shaft of ulna. Locate just beyond the tip of the index finger just ulnarly to the shaft—1 cm to 5 cm deep.

Cross-sectional anatomy: forearm



*For anatomical reference only.

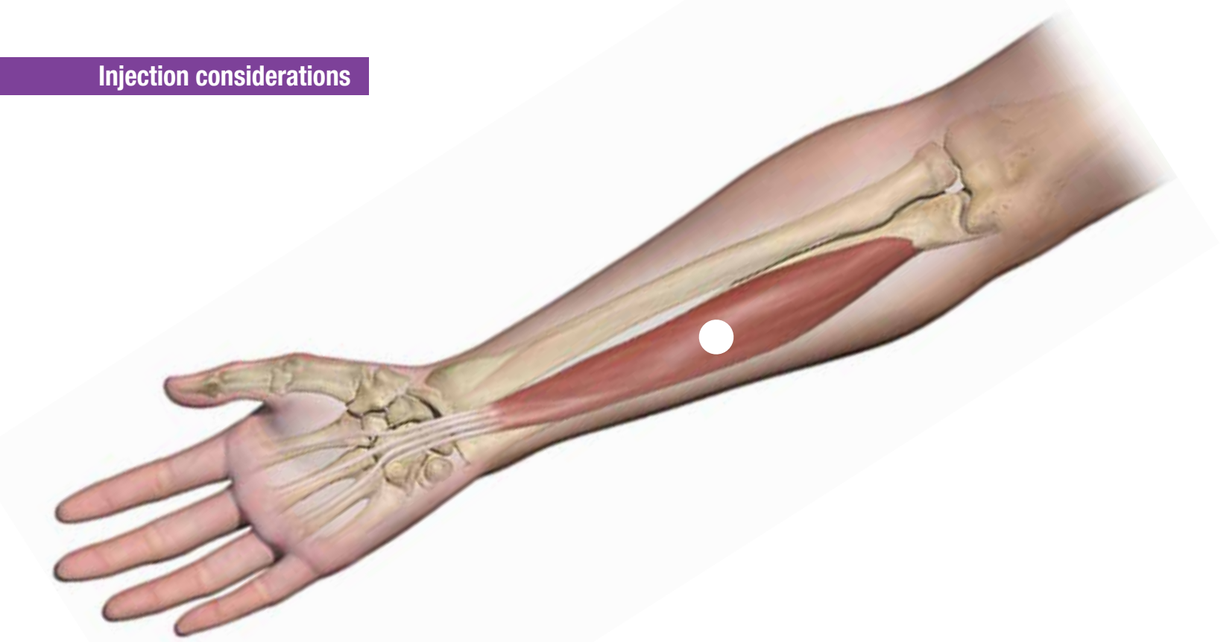
IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Increased Risk of Clinically Significant Effects With Pre-existing Neuromuscular Disorders

Individuals with peripheral motor neuropathic diseases, amyotrophic lateral sclerosis (ALS), or neuromuscular junction disorders (eg, myasthenia gravis or Lambert-Eaton syndrome) should be monitored when given botulinum toxin. Patients with known or unrecognized neuromuscular disorders or neuromuscular junction disorders may be at increased risk of clinically significant effects including generalized muscle weakness, diplopia, ptosis, dysphonia, dysarthria, severe dysphagia, and respiratory compromise from therapeutic doses of BOTOX® (see *Warnings and Precautions*).

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor digitorum profundus (continued)



Injection considerations

- If possible, position the elbow bent and forearm vertical
- Consider injecting the mid forearm, proximal toward the elbow, at the largest part of the muscle. Note that the muscle is deeper in the anatomy of the arm
- If there is more spasticity in fingers 2 and 3, advance your needle more laterally
- The finger flexors are located in the middle half of the forearm. Target this muscle when the distal interphalangeal joints are closed
- Be aware of the surrounding nerves, arteries, and veins that are in the trajectory of the needle path

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Dysphagia and Breathing Difficulties

Treatment with BOTOX® and other botulinum toxin products can result in swallowing or breathing difficulties. Patients with pre-existing swallowing or breathing difficulties may be more susceptible to these complications. In most cases, this is a consequence of weakening of muscles in the area of injection that are involved in breathing or oropharyngeal muscles that control swallowing or breathing (see *Boxed Warning*).

Pulmonary Effects of BOTOX® in Patients With Compromised Respiratory Status Treated for Spasticity

Patients with compromised respiratory status treated with BOTOX® for adult spasticity should be monitored closely.

Please see additional Important Safety Information about BOTOX® on following pages.

Notes

Flexor digitorum superficialis (sublimis)

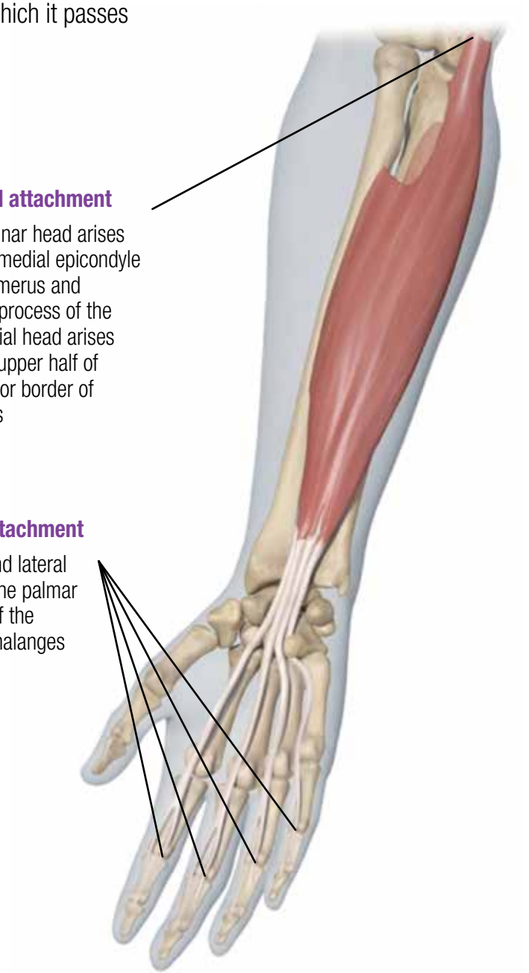
▶ **BOTOX® dose: 30 Units to 50 Units (1 site)**

Muscle action[19]

Primarily finger flexion of proximal interphalangeal (PIP) joints, but can also flex any or all of the joints over which it passes

Proximal attachment

Humeroulnar head arises from the medial epicondyle of the humerus and coronoid process of the ulna. Radial head arises from the upper half of the anterior border of the radius



Distal attachment

Medial and lateral sides of the palmar surface of the middle phalanges

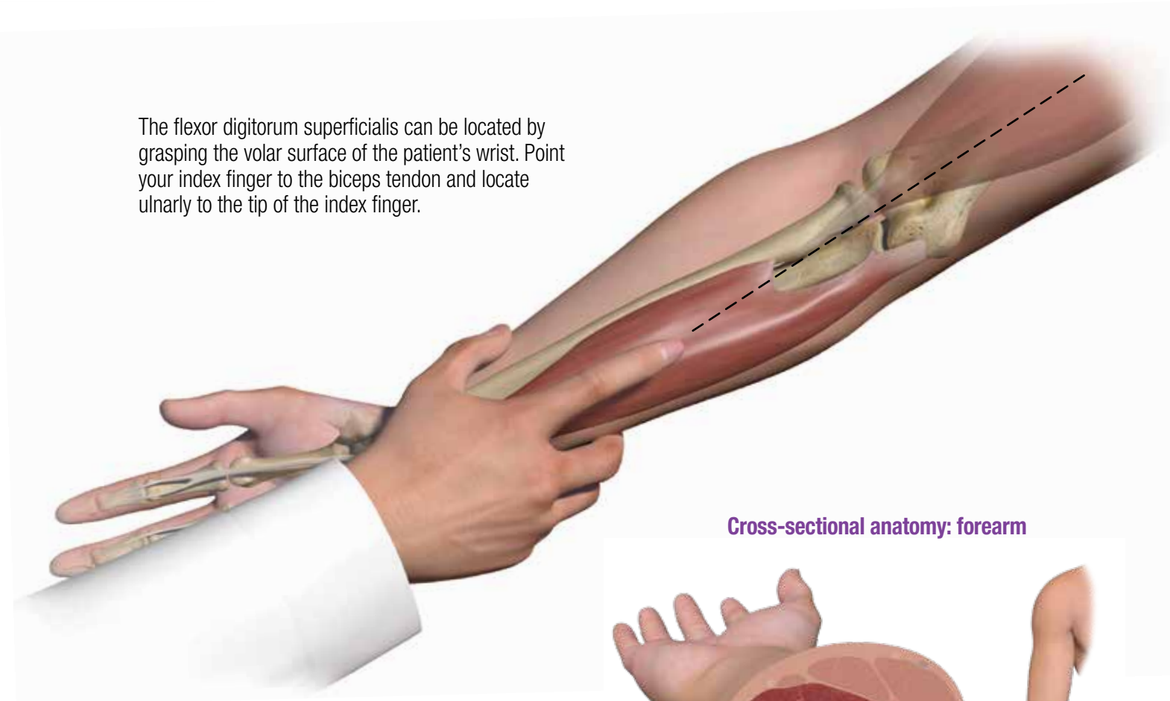
Other muscle involved in finger flexion (proximal interphalangeal joints)

- Flexor digitorum profundus

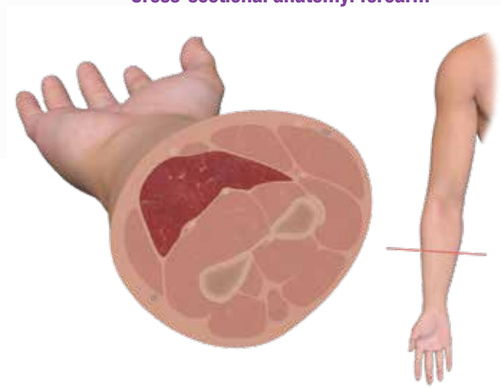
Flexor digitorum superficialis (sublimis) (continued)

Localization[20]

The flexor digitorum superficialis can be located by grasping the volar surface of the patient's wrist. Point your index finger to the biceps tendon and locate ulnarly to the tip of the index finger.



Cross-sectional anatomy: forearm



IMPORTANT SAFETY INFORMATION (continued)

WARNINGS AND PRECAUTIONS (continued)

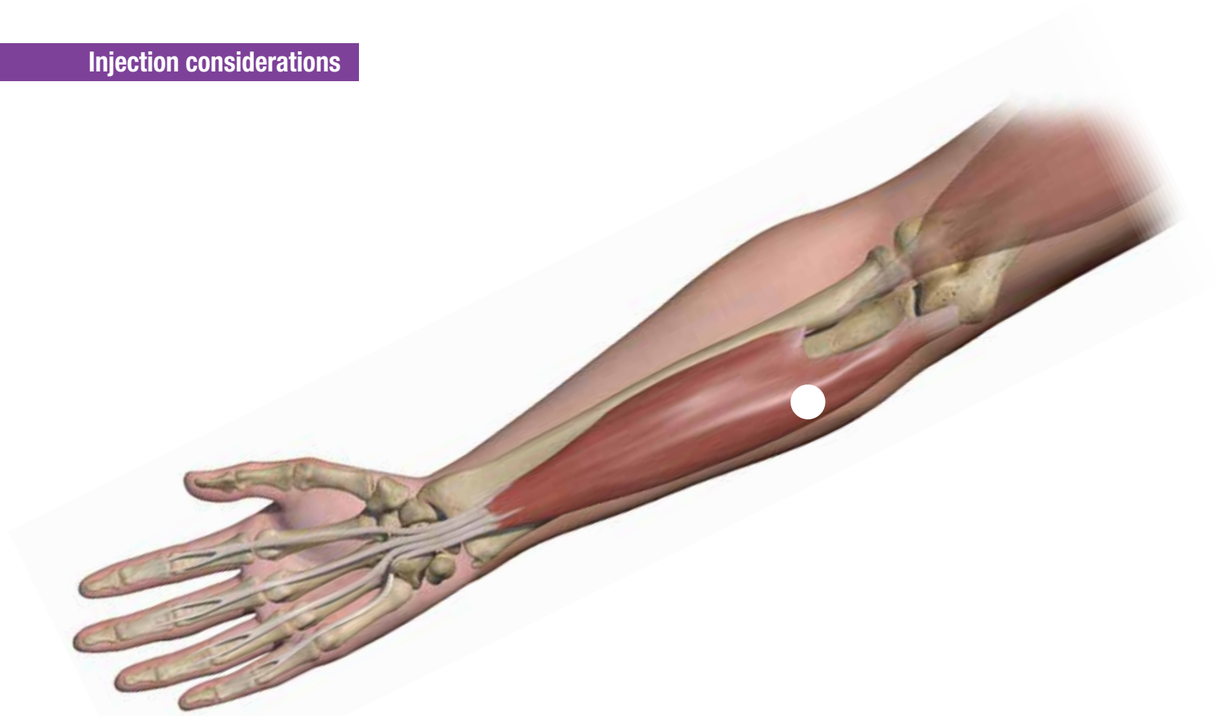
Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity

Bronchitis was reported more frequently as an adverse reaction in adult patients treated for upper limb spasticity with BOTOX® (3% at 251 Units to 360 Units total dose) compared to placebo (1%). In adult patients with reduced lung function treated for upper limb spasticity, upper respiratory tract infections were also reported more frequently as adverse reactions in patients treated with BOTOX® (11% at 360 Units total dose; 8% at 240 Units total dose) compared to placebo (6%). In adult patients treated for lower limb spasticity, upper respiratory tract infections were reported more frequently as an adverse reaction in patients treated with BOTOX® (2% at 300 Units to 400 Units total dose), compared to placebo (1%).

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor digitorum superficialis (sublimis) (continued)

Injection considerations



- Target this muscle when the proximal interphalangeal (PIP) joints are open and spastic
- The finger flexors are located in the middle third to half of the forearm. Localization of this muscle may be difficult
- Passively extend the PIP joints to help localize the muscle. The use of E-Stim is highly recommended
- Once the muscle has been anatomically localized, use EMG and/or E-Stim guidance to further identify the muscle
- If the fingers can be stretched out, it makes identifying the superficialis and profundus with E-Stim easier

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Human Albumin and Transmission of Viral Diseases

This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would also be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

Please see additional Important Safety Information about BOTOX® on following pages.

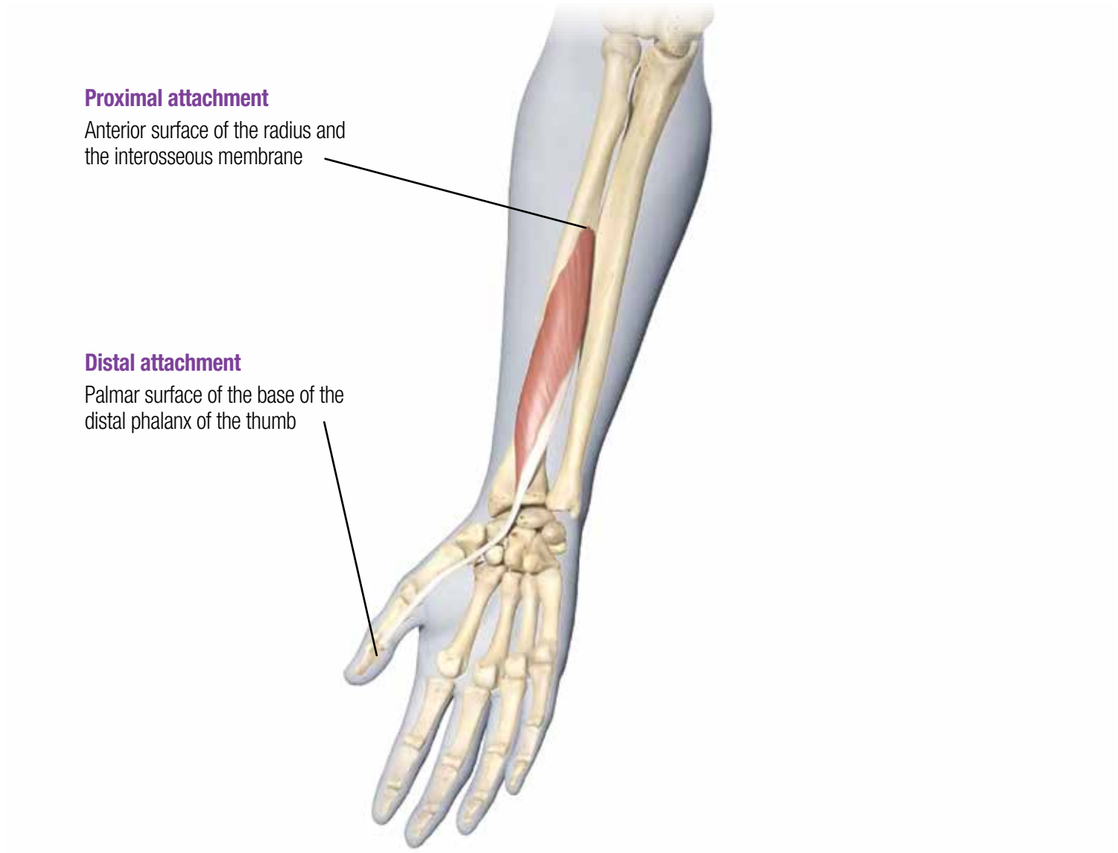
Notes

Flexor pollicis longus

▶ **BOTOX® dose: 20 Units (1 site)**

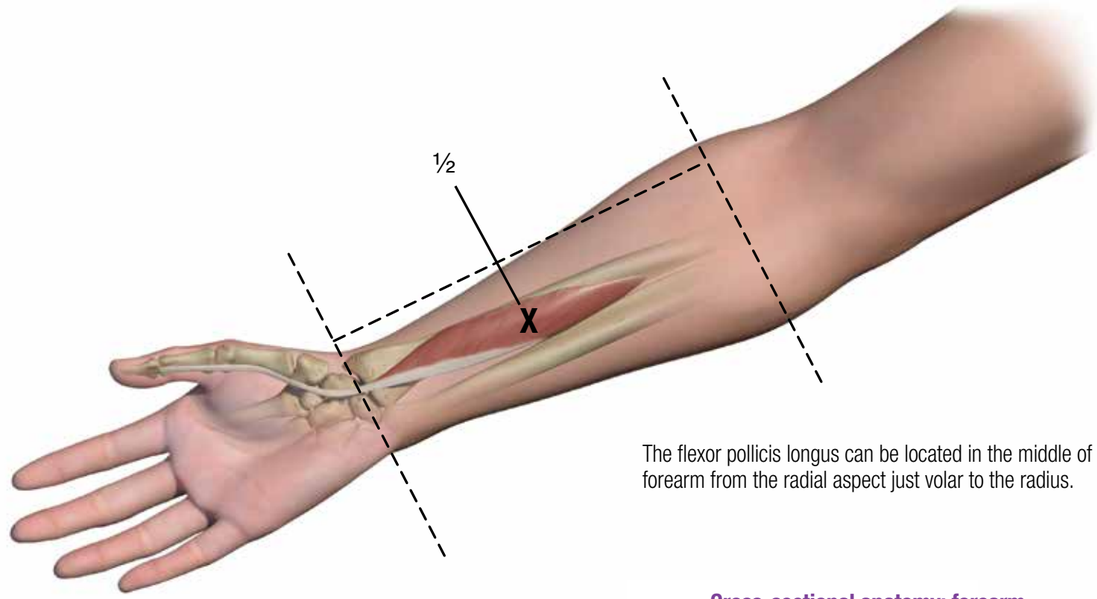
Muscle action[19]

Flexes thumb, but can also be involved in wrist flexion



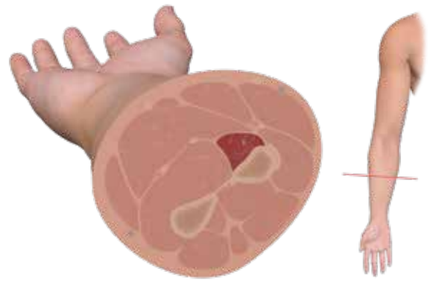
Flexor pollicis longus (continued)

Localization[20]



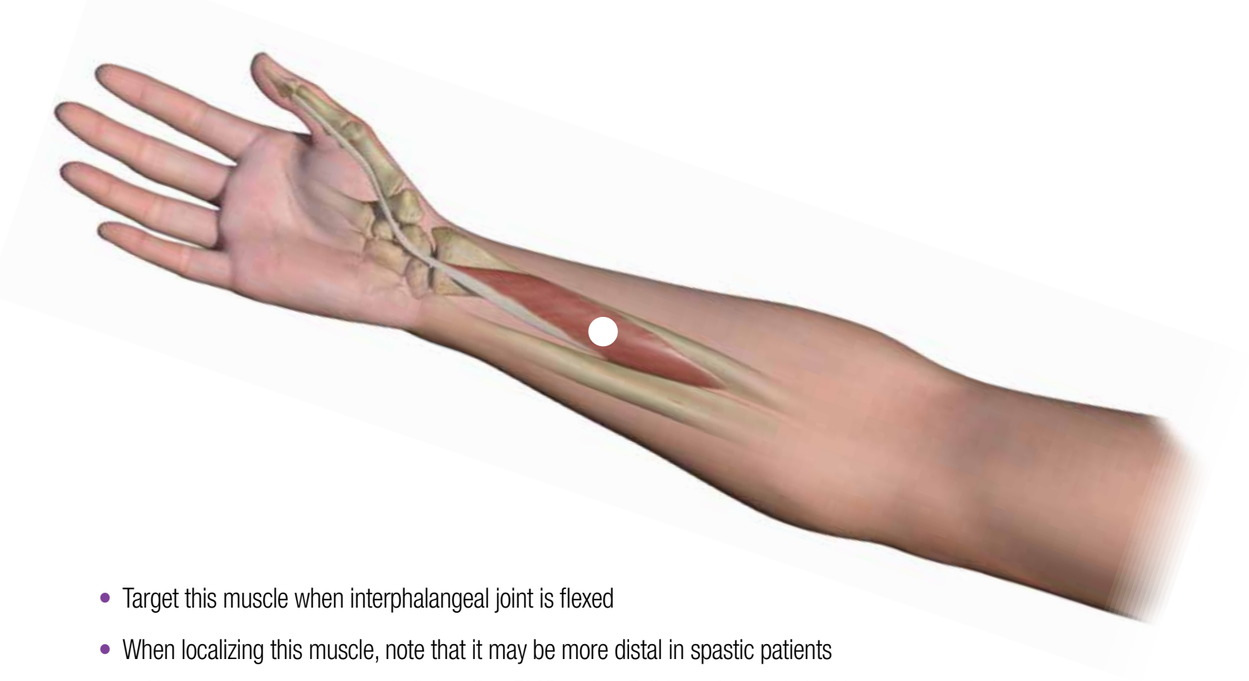
The flexor pollicis longus can be located in the middle of the forearm from the radial aspect just volar to the radius.

Cross-sectional anatomy: forearm



Flexor pollicis longus (continued)

Injection considerations



- Target this muscle when interphalangeal joint is flexed
- When localizing this muscle, note that it may be more distal in spastic patients
  - Use passive maneuvers to help localize. EMG and/or E-Stim guidance is highly recommended
  - Stabilize the joints prior to injection
- It may be helpful to palpate the radius and then slide to the ulnar side of the radius. Consider inserting the needle volar and lateral to the midline about 2/3 the distance of the forearm from the medial epicondyle

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)

Postmarketing Experience

Adverse reactions that have been identified during postapproval use of BOTOX® are discussed in greater detail in Postmarketing Experience (Section 6.3 of the Prescribing Information).

There have been spontaneous reports of death, sometimes associated with dysphagia, pneumonia, and/or other significant debility or anaphylaxis, after treatment with botulinum toxin. There have also been reports of adverse events involving the cardiovascular system, including arrhythmia and myocardial infarction, some with fatal outcomes. Some of these patients had risk factors including cardiovascular disease. The exact relationship of these events to the botulinum toxin injection has not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Notes

Adductor pollicis

▶ **BOTOX® dose: 20 Units (1 site)**

Muscle action[19]

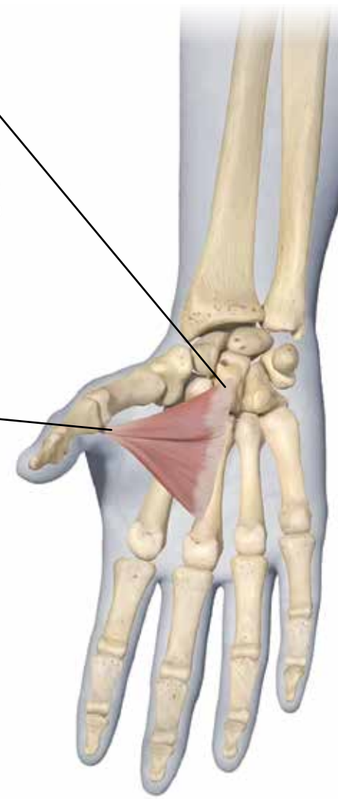
Adducts the thumb

Proximal attachment

Oblique head is attached to the capitate bone, the bases of the second and third metacarpal bones, the palmar ligaments of the carpus, and the sheath of the tendon of flexor carpi radialis. The transverse head is attached to the distal two-thirds of the palmar surface of the third metacarpal

Distal attachment

Base of the proximal phalanx of the thumb



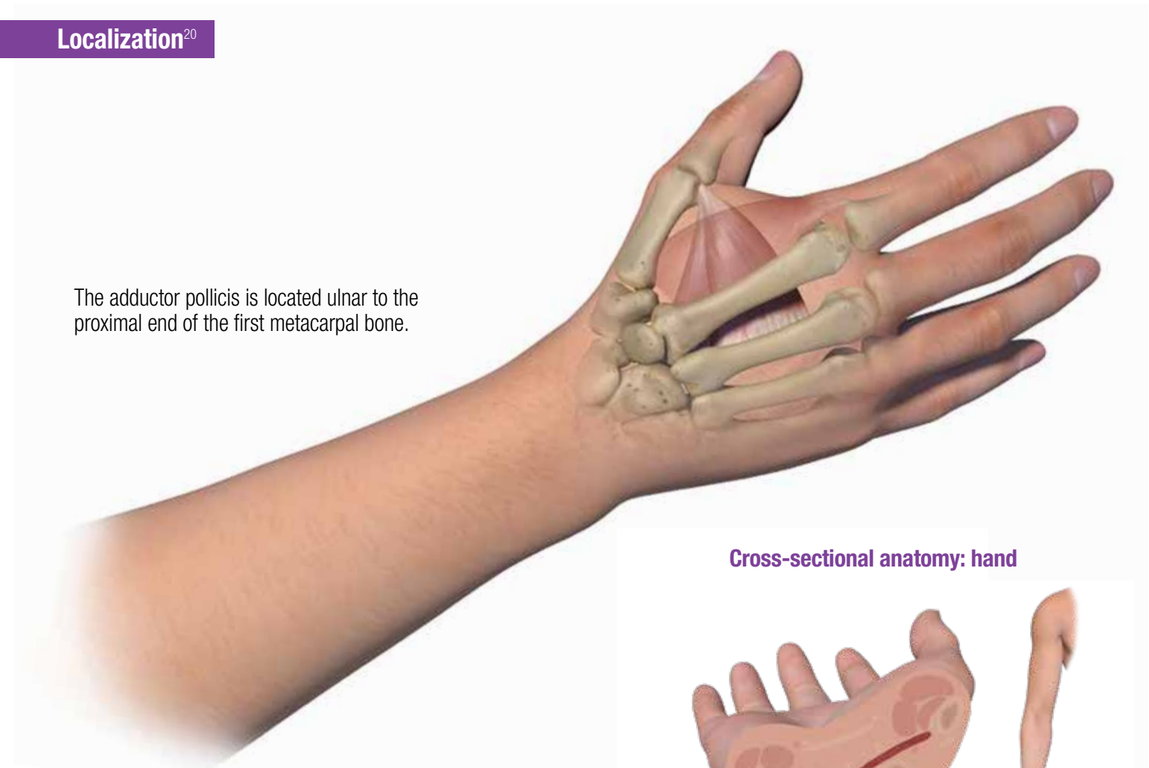
IMPORTANT SAFETY INFORMATION (continued)
DRUG INTERACTIONS

Co-administration of BOTOX® and other agents interfering with neuromuscular transmission (eg, aminoglycosides, curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. Use of anticholinergic drugs after administration of BOTOX® may potentiate systemic anticholinergic effects.

Adductor pollicis (continued)

Localization[20]

The adductor pollicis is located ulnar to the proximal end of the first metacarpal bone.



Cross-sectional anatomy: hand

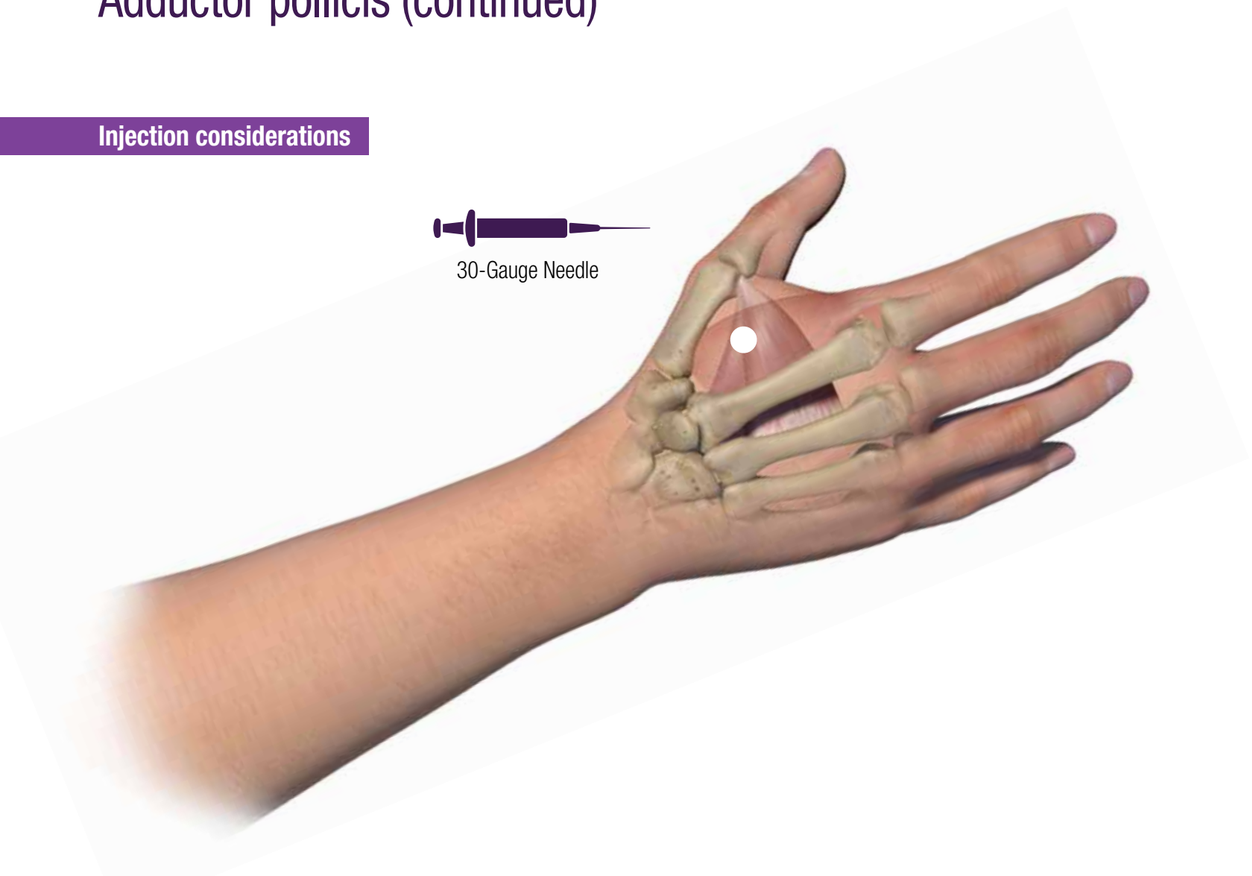
IMPORTANT SAFETY INFORMATION (continued)
DRUG INTERACTIONS (continued)

The effect of administering different botulinum neurotoxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of BOTOX®.

Please see the accompanying BOTOX® full Prescribing Information including Boxed Warning and Medication Guide.

Adductor pollicis (continued)

Injection considerations



- This muscle is most often injected when trying to position the thumb for a wrist/hand orthosis
- Consider inserting the needle from the backside of the hand and injecting quickly to minimize pain
- It is often a painful injection site, so consider the use of a 30-gauge needle

IMPORTANT SAFETY INFORMATION (continued)

CONTRAINDICATIONS

BOTOX® is contraindicated in the presence of infection at the proposed injection site(s) and in patients who are hypersensitive to any botulinum toxin product or to any of the components in the formulation.

WARNINGS AND PRECAUTIONS

Spread of Toxin Effect

See Boxed Warning.

Lack of Interchangeability Between Botulinum Toxin Products

The potency Units of BOTOX® are specific to the preparation and assay method utilized. They are not interchangeable with other preparations of botulinum toxin products and, therefore, Units of biological activity of BOTOX® cannot be compared to nor converted into Units of any other botulinum toxin products assessed with any other specific assay method.

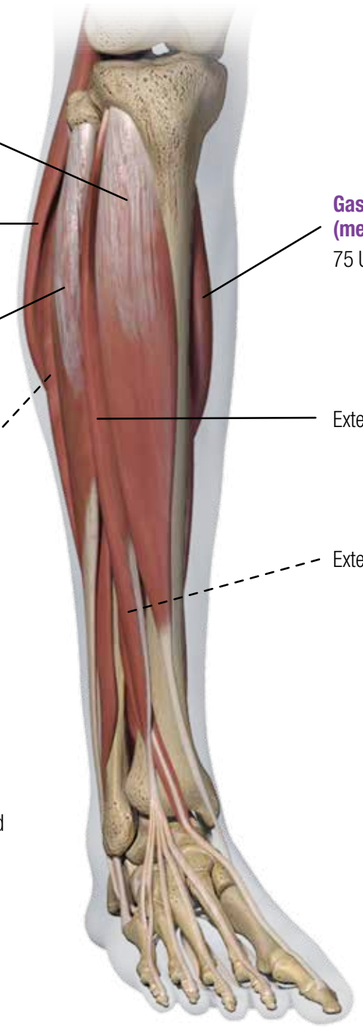
Please see additional Important Safety Information about BOTOX® on following pages.

Notes

Main muscles involved in Adult Lower Limb Spasticity

Muscles listed in purple are those approved for BOTOX® injection[18]

Anterior view



Tibialis Anterior*

Gastrocnemius (lateral head)
75 Units divided in 3 sites

Fibularis Longus*

Soleus (hidden)
75 Units divided in 3 sites

Gastrocnemius (medial head)
75 Units divided in 3 sites

Extensor Digitorum Longus*

Extensor Hallucis Longus (hidden)*

*For anatomical reference only. Lines indicate muscle location, and do not point out sites for injection.

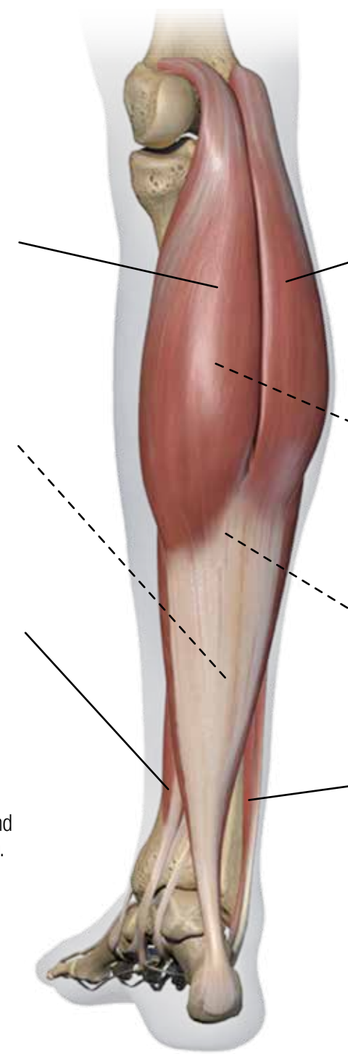
IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use
Serious adverse reactions, including excessive weakness, dysphagia, and aspiration pneumonia, with some adverse reactions associated with fatal outcomes, have been reported in patients who received BOTOX® injections for unapproved uses. In these cases, the adverse reactions were not necessarily related to distant spread of toxin, but may have resulted from the administration of BOTOX® to the site of injection and/or adjacent structures.

Approved Muscles Involved in Common Postures

Ankle Flexors
Gastrocnemius
Soleus
Tibialis Posterior

Toe Flexors
Flexor Digitorum Longus
Flexor Hallucis Longus

Posterior view



Gastrocnemius (medial head)
75 Units divided in 3 sites

Flexor Hallucis Longus (hidden)
50 Units divided in 2 sites

Flexor Digitorum Longus
50 Units divided in 2 sites

Gastrocnemius (lateral head)
75 Units divided in 3 sites

Tibialis Posterior (hidden)
75 Units divided in 3 sites

Soleus (hidden)
75 Units divided in 3 sites

Fibularis Longus*

*For anatomical reference only. Lines indicate muscle location, and do not point out sites for injection.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use (continued)
In several of the cases, patients had pre-existing dysphagia or other significant disabilities. There is insufficient information to identify factors associated with an increased risk for adverse reactions associated with the unapproved uses of BOTOX®. The safety and effectiveness of BOTOX® for unapproved uses have not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Gastrocnemius

▶ **BOTOX® dose: 75 Units divided in 3 sites (medial head) and 75 Units divided in 3 sites (lateral head)**

Muscle action[19]

Involved in plantarflexion and flexing the knee

Proximal attachment

Lateral head: Lateral surface of the lateral condyle and to the lower part of the corresponding supracondylar line

Medial head: Popliteal surface of the femur just above the medial condyle

Distal attachment

Posterior surface of calcaneus by calcaneal tendon

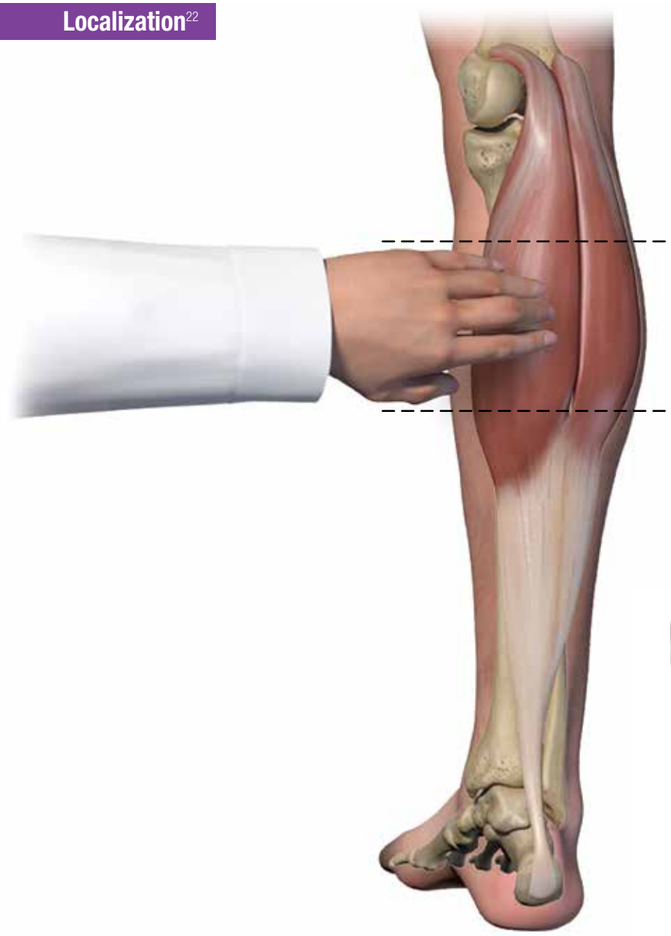
Other muscles involved in plantarflexion

- Soleus
- Tibialis posterior
- Flexor digitorum longus
- Flexor hallucis longus
- Fibularis longus*

*For anatomical reference only.

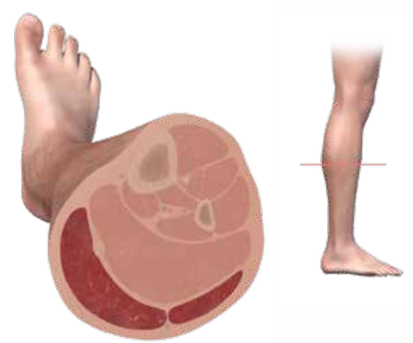
Gastrocnemius (continued)

Localization[22]



Midbelly is located one-quarter the distance from popliteal crease to heel.

Cross-sectional anatomy: midcalf



IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

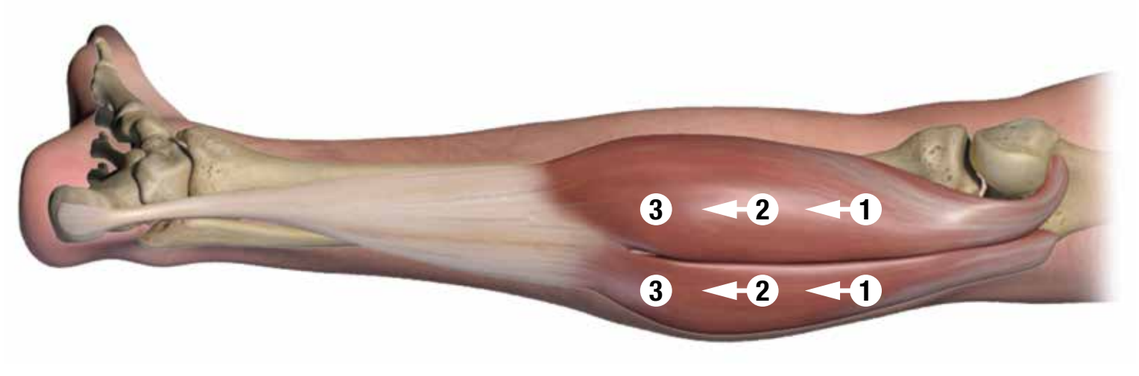
Hypersensitivity Reactions

Serious and/or immediate hypersensitivity reactions have been reported. These reactions include anaphylaxis, serum sickness, urticaria, soft-tissue edema, and dyspnea. If such a reaction occurs, further injection of BOTOX® should be discontinued and appropriate medical therapy immediately instituted. One fatal case of anaphylaxis has been reported in which lidocaine was used as the diluent, and consequently the causal agent cannot be reliably determined.

Please see additional Important Safety Information about BOTOX® on following pages.

Gastrocnemius (continued)

Injection considerations



- Gastrocnemius and soleus muscles make up the triceps surae and should be thought of as a complex
- The gastrocnemius crosses both the knee and ankle
- Position patient prone when possible
- Consider following a straight line from proximal to distal in both the medial and lateral heads when injecting the 3 sites
- Avoid going too distal so that the tendinous area is not inadvertently injected
- Gastrocnemius is thinner than the soleus, so consider needle depth carefully

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Increased Risk of Clinically Significant Effects With Pre-existing Neuromuscular Disorders

Individuals with peripheral motor neuropathic diseases, amyotrophic lateral sclerosis (ALS), or neuromuscular junction disorders (eg, myasthenia gravis or Lambert-Eaton syndrome) should be monitored when given botulinum toxin. Patients with known or unrecognized neuromuscular disorders or neuromuscular junction disorders may be at increased risk of clinically significant effects including generalized muscle weakness, diplopia, ptosis, dysphonia, dysarthria, severe dysphagia, and respiratory compromise from therapeutic doses of BOTOX® (see *Warnings and Precautions*).

Please see additional Important Safety Information about BOTOX® on following pages.

Notes

Soleus

▶ **BOTOX® dose: 75 Units divided in 3 sites**

Muscle action[19]

Involved in plantarflexion

Proximal attachment

Posterior surface of the head and proximal quarter of the shaft of the fibula, soleal line and middle third of the medial border of the tibia, and the interosseous membrane

Distal attachment

Posterior surface of calcaneus by calcaneal tendon

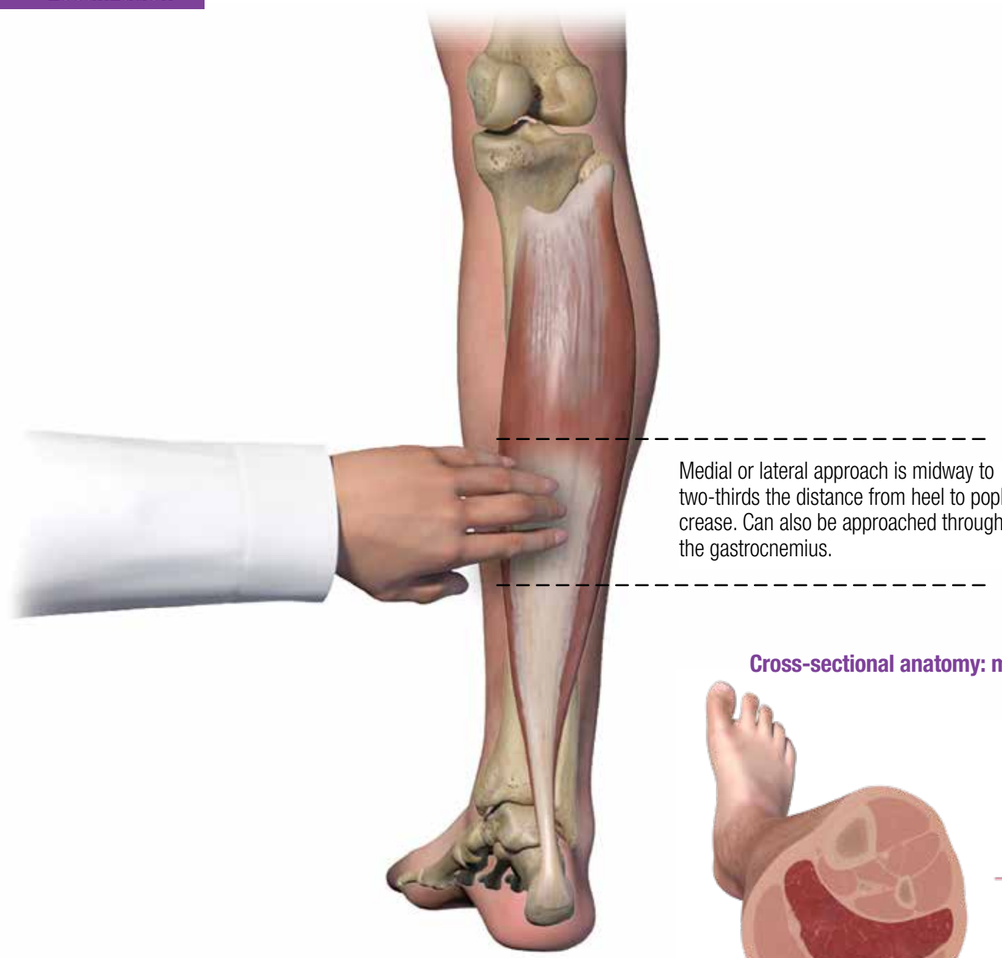
Other muscles involved in plantarflexion

- Gastrocnemius
- Tibialis posterior
- Flexor digitorum longus
- Flexor hallucis longus
- Fibularis longus*

*For anatomical reference only.

Soleus (continued)

Localization[22]



Medial or lateral approach is midway to two-thirds the distance from heel to popliteal crease. Can also be approached through the gastrocnemius.

Cross-sectional anatomy: midcalf

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

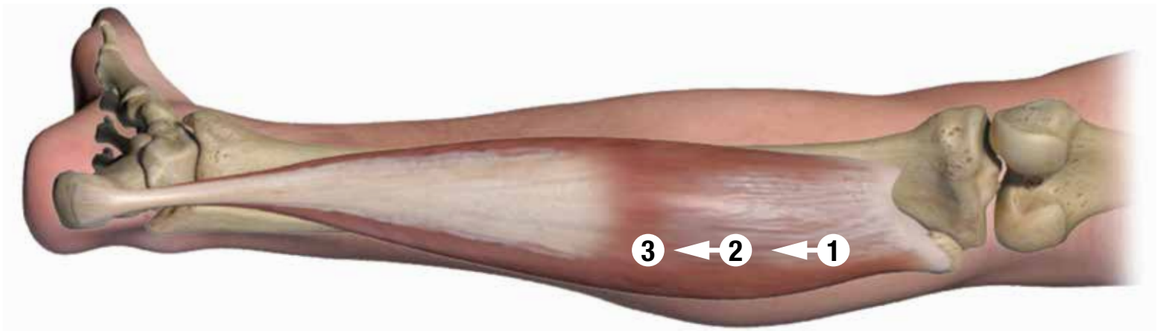
Dysphagia and Breathing Difficulties

Treatment with BOTOX® and other botulinum toxin products can result in swallowing or breathing difficulties. Patients with pre-existing swallowing or breathing difficulties may be more susceptible to these complications. In most cases, this is a consequence of weakening of muscles in the area of injection that are involved in breathing or oropharyngeal muscles that control swallowing or breathing (see *Boxed Warning*).

Please see additional Important Safety Information about BOTOX® on following pages.

Soleus (continued)

Injection considerations



- Soleus and gastrocnemius muscles make up the triceps surae and should be thought of as a complex
- Position patient prone when possible
  - Activate the muscle with the knee flexed and have the patient plantarflex
- The soleus is deep and distal to the gastrocnemius, slightly lateral to the midline down the long axis of the leg
- Consider following a straight line from proximal to distal when injecting the 3 sites
- Consider advancing the needle to avoid further skin punctures
- Avoid going too distal to avoid the tendinous area. Stay above the midcalf

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Pulmonary Effects of BOTOX® in Patients With Compromised Respiratory Status Treated for Spasticity
Patients with compromised respiratory status treated with BOTOX® for adult spasticity should be monitored closely.

Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity
Bronchitis was reported more frequently as an adverse reaction in adult patients treated for upper limb spasticity with BOTOX® (3% at 251 Units to 360 Units total dose) compared to placebo (1%). In adult patients with reduced lung function treated for upper limb spasticity, upper respiratory tract infections were also reported more frequently as adverse reactions in patients treated with BOTOX® (11% at 360 Units total dose; 8% at 240 Units total dose) compared to placebo (6%). In adult patients treated for lower limb spasticity, upper respiratory tract infections were reported more frequently as an adverse reaction in patients treated with BOTOX® (2% at 300 Units to 400 Units total dose), compared to placebo (1%).

Please see additional Important Safety Information about BOTOX® on following pages.

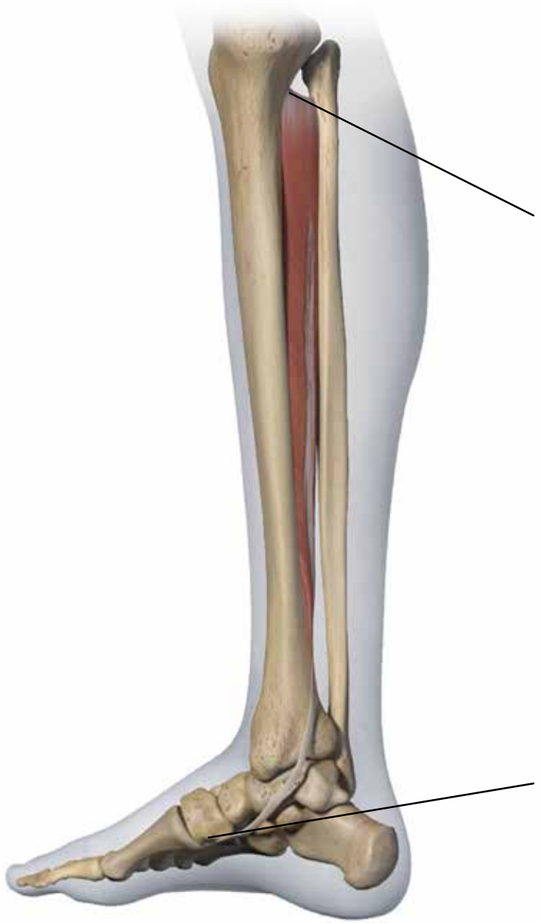
Notes

Tibialis posterior

▶ **BOTOX® dose: 75 Units divided in 3 sites**

Muscle action[19,23]

Involved in plantarflexion and can also invert and adduct the foot



Proximal attachment

Posterior surface of the interosseous membrane, lateral area on the posterior surface of the tibia between the soleal line above, and medial strip of the posterior fibular surface

Distal attachment

Tuberosity of navicular, medial, and intermediate cuneiforms, and bases of second, third, and fourth metatarsals

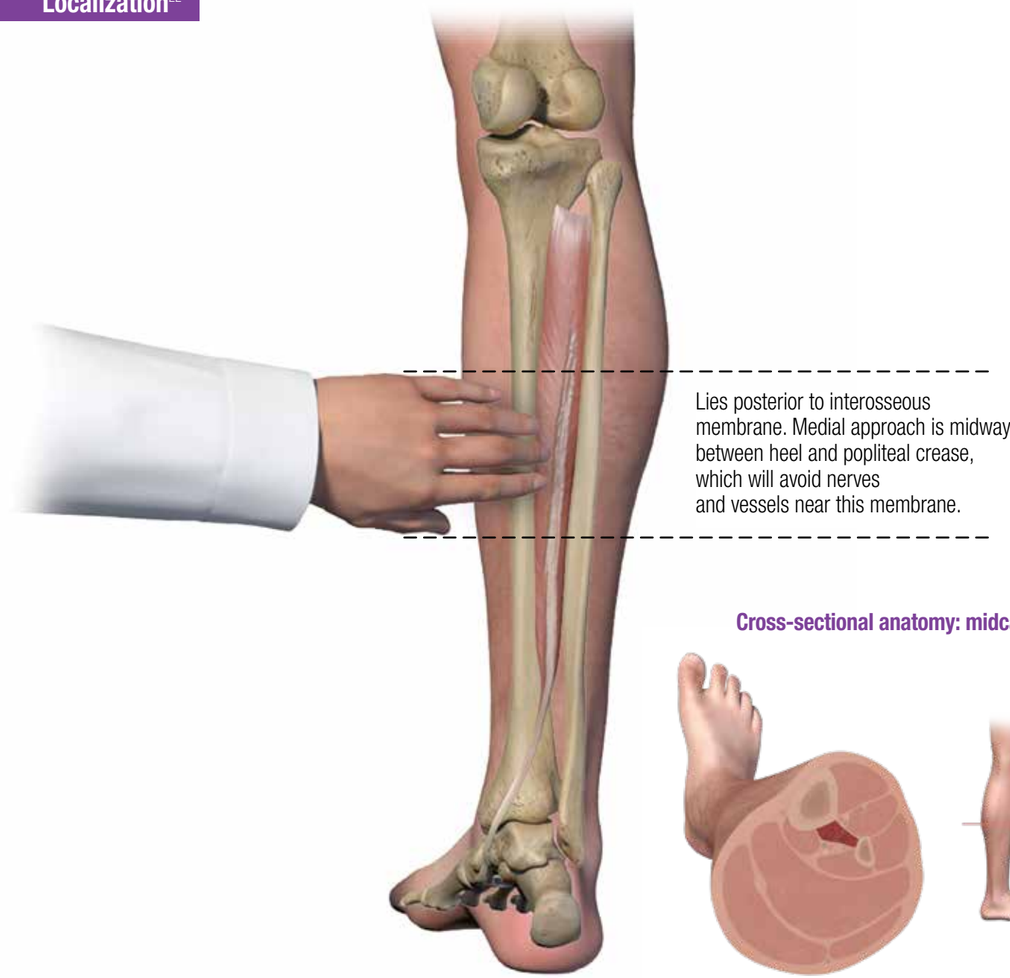
Other muscles involved in plantarflexion and/or foot inversion

- Gastrocnemius (plantarflexion only)
- Soleus (plantarflexion only)
- Flexor digitorum longus
- Flexor hallucis longus[24]
- Fibularis longus (plantarflexion only)*
- Tibialis anterior (foot inversion only)*

*For anatomical reference only.

Tibialis posterior (continued)

Localization[22]



Lies posterior to interosseous membrane. Medial approach is midway between heel and popliteal crease, which will avoid nerves and vessels near this membrane.

Cross-sectional anatomy: midcalf

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

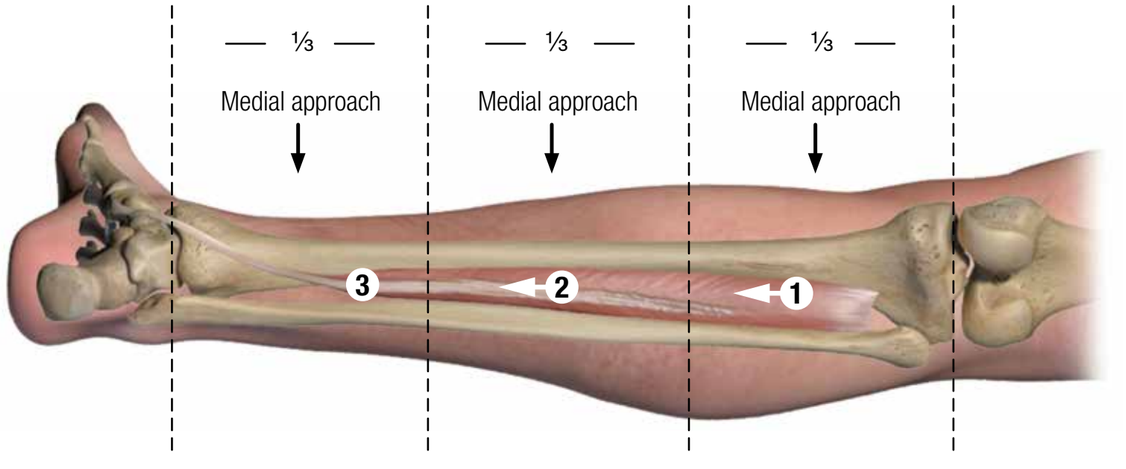
Human Albumin and Transmission of Viral Diseases

This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would also be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

Please see additional Important Safety Information about BOTOX® on following pages.

Tibialis posterior (continued)

Injection considerations



- Position the patient supine with his/her leg extended, when possible
  - Recommend using established guidance techniques as the muscle may be difficult to locate
- This muscle runs the length of the tibia so divide the leg into thirds
- Consider even distribution from proximal to distal when injecting the 3 sites
- Use a medial approach to avoid the neurovascular bundle

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS
Adverse reactions to BOTOX® for injection are discussed in greater detail in the following sections: *Boxed Warning*, *Contraindications*, and *Warnings and Precautions*.

Adult Upper Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for upper limb spasticity include pain in extremity, muscular weakness, fatigue, nausea, and bronchitis.

Adult Lower Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for lower limb spasticity include arthralgia, back pain, myalgia, upper respiratory tract infection, and injection-site pain.

Please see additional Important Safety Information about BOTOX® on following pages.

Notes

Flexor hallucis longus

▶ **BOTOX® dose: 50 Units divided in 2 sites**

Muscle action[19,24]

Involved in flexion of hallux, plantarflexion, and foot inversion

Proximal attachment

Distal two-thirds of the posterior surface of the fibula, adjacent interosseous membrane and the posterior crural intermuscular septum, and fascia covering tibialis posterior

Distal attachment

Bases of distal phalanx of hallux

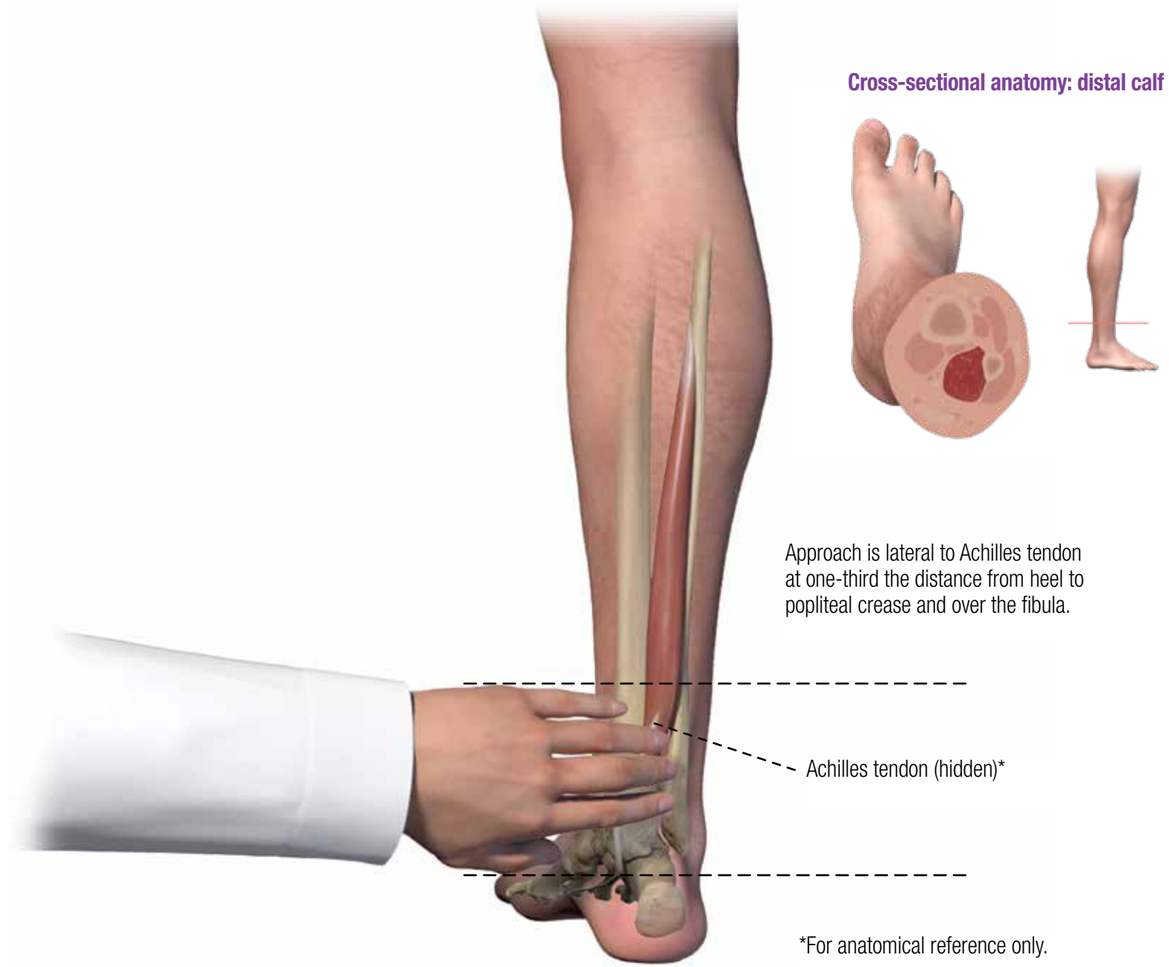
Other muscles involved in plantarflexion and/or foot inversion

- Gastrocnemius (plantarflexion only)
- Soleus (plantarflexion only)
- Tibialis posterior[23]
- Flexor digitorum longus
- Fibularis longus (plantarflexion only)*
- Tibialis anterior (foot inversion only)*

*For anatomical reference only.

Flexor hallucis longus (continued)

Localization[22]



IMPORTANT SAFETY INFORMATION (continued)

ADVERSE REACTIONS (continued)

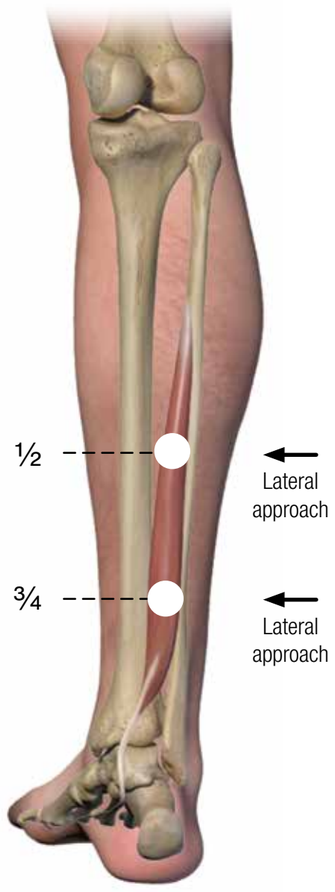
Postmarketing Experience

Adverse reactions that have been identified during postapproval use of BOTOX® are discussed in greater detail in Postmarketing Experience (Section 6.3 of the Prescribing Information).

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor hallucis longus (continued)

Injection considerations



- Position the patient supine, when possible
- This muscle starts at the lateral side of the leg and comes across the medial side at the ankle, but closer to the tendon than the bone
- Based on the anatomical structure, consider a lateral approach
- Consider targeting 1/3 to 2/3 proximal, respectively, to the lateral malleolus, 1/3 of the way up from the back of the heel to the knee when injecting the 2 sites
  - Consider placing the needle midway to 3/4 distally down the leg
- Inject this muscle when the great toe has flexion spasticity

Notes

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Postmarketing Experience (continued)
There have been spontaneous reports of death, sometimes associated with dysphagia, pneumonia, and/or other significant debility or anaphylaxis, after treatment with botulinum toxin. There have also been reports of adverse events involving the cardiovascular system, including arrhythmia and myocardial infarction, some with fatal outcomes. Some of these patients had risk factors including cardiovascular disease. The exact relationship of these events to the botulinum toxin injection has not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Flexor digitorum longus

▶ **BOTOX® dose: 50 Units divided in 2 sites**[18]

Muscle action[19,24]

Involved in flexion of lateral 4 digits, plantarflexion, and foot inversion

Proximal attachment

Posterior surface of the tibia medial to tibialis posterior from just below the soleal line and fascia covering tibialis posterior

Distal attachment

Bases of distal phalanges of lateral 4 digits

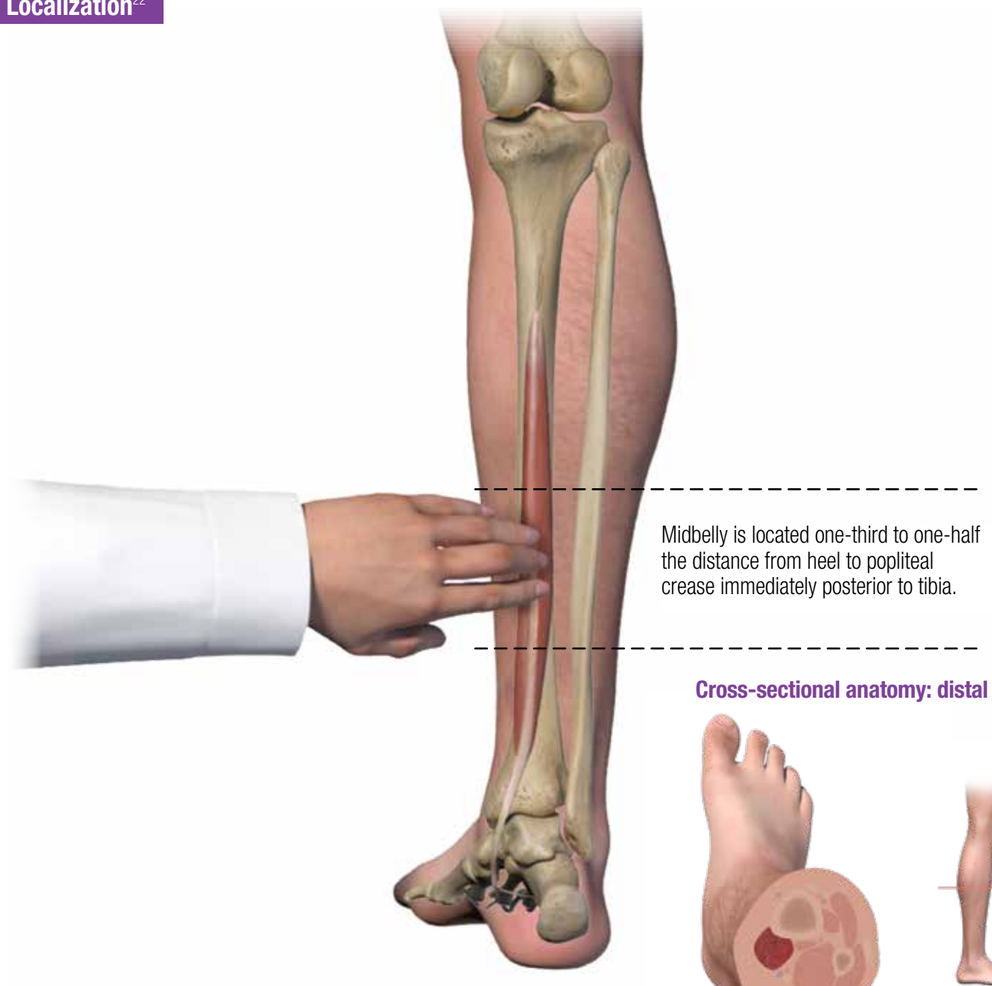
Other muscles involved in plantarflexion and/or foot inversion

- Gastrocnemius (plantarflexion only)
- Soleus (plantarflexion only)
- Tibialis posterior
- Flexor hallucis longus
- Fibularis longus (plantarflexion only)*
- Tibialis anterior (foot inversion only)*

*For anatomical reference only.

Flexor digitorum longus (continued)

Localization[22]



Midbelly is located one-third to one-half the distance from heel to popliteal crease immediately posterior to tibia.

Cross-sectional anatomy: distal calf

IMPORTANT SAFETY INFORMATION (continued)

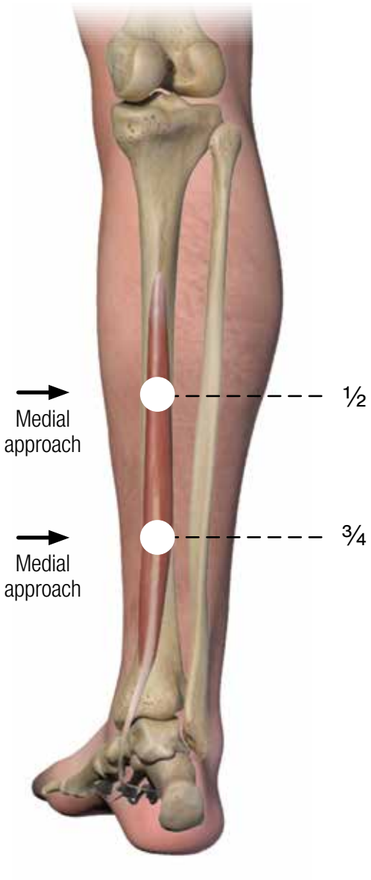
DRUG INTERACTIONS

Co-administration of BOTOX® and other agents interfering with neuromuscular transmission (eg, aminoglycosides, curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. Use of anticholinergic drugs after administration of BOTOX® may potentiate systemic anticholinergic effects. The effect of administering different botulinum neurotoxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of BOTOX®.

Please see the accompanying BOTOX® full Prescribing Information including Boxed Warning and Medication Guide.

Flexor digitorum longus (continued)

Injection considerations



- The patient can be positioned supine, prone, or sitting
- This muscle starts at the medial part of the leg and continues laterally to the foot
- Have patients bend their toes while using EMG to help localize the muscle. With E-Stim you want them to relax the muscle, not bend their toes
- Consider targeting 1/2 and 3/4 distally down the leg when injecting the 2 sites

Notes

IMPORTANT SAFETY INFORMATION (continued)

CONTRAINDICATIONS

BOTOX® is contraindicated in the presence of infection at the proposed injection site(s) and in patients who are hypersensitive to any botulinum toxin product or to any of the components in the formulation.

WARNINGS AND PRECAUTIONS

Spread of Toxin Effect

See Boxed Warning.

Lack of Interchangeability Between Botulinum Toxin Products

The potency Units of BOTOX® are specific to the preparation and assay method utilized. They are not interchangeable with other preparations of botulinum toxin products and, therefore, Units of biological activity of BOTOX® cannot be compared to nor converted into Units of any other botulinum toxin products assessed with any other specific assay method.

Please see additional Important Safety Information about BOTOX® on following pages.

BOTOX® Treatment Framework documentation

Utilize the BOTOX® Treatment Framework when evaluating your next Adult Spasticity patient

The right goals

Patient name:

Posture(s):

- ☐ **Flexed elbow**
- ☐ **Thumb in palm**
- ☐ **Flexed wrist**
- ☐ **Flexed ankle**
- ☐ **Flexed fingers**
- ☐ **Flexed toes**

Symptoms:

Goals:

- ☐ Repeat goals back to patient

Expectations:

- ☐ BOTOX® is not a cure, nor a substitute for usual standard of care
- ☐ Muscles/dose may need to be adjusted for future injections
- ☐ Fine needles are used during injections
- ☐ Patient should return for a 4- to 6-week follow-up evaluation
- ☐ Review insurance plans to determine out-of-pocket costs and use of potential savings programs

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Serious Adverse Reactions With Unapproved Use
Serious adverse reactions, including excessive weakness, dysphagia, and aspiration pneumonia, with some adverse reactions associated with fatal outcomes, have been reported in patients who received BOTOX® injections for unapproved uses. In these cases, the adverse reactions were not necessarily related to distant spread of toxin, but may have resulted from the administration of BOTOX® to the site of injection and/or adjacent structures. In several of the cases, patients had pre-existing dysphagia or other significant disabilities. There is insufficient information to identify factors associated with an increased risk for adverse reactions associated with the unapproved uses of BOTOX®. The safety and effectiveness of BOTOX® for unapproved uses have not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

BOTOX® Treatment Framework documentation (continued)

Injection 1: Muscles injected/BOTOX® dose

The right muscles/dose

Injected	Approved Muscle[18]	BOTOX® Dose
	Gastrocnemius–medial head (75 Units divided in 3 sites)	
	Gastrocnemius–lateral head (75 Units divided in 3 sites)	
	Soleus (75 Units divided in 3 sites)	
	Tibialis posterior (75 Units divided in 3 sites)	
	Flexor hallucis longus (50 Units divided in 2 sites)	
	Flexor digitorum longus (50 Units divided in 2 sites)	
	Biceps brachii (100 Units to 200 Units divided in 4 sites)	
	Flexor carpi radialis (12.5 Units to 50 Units in 1 site)	
	Flexor carpi ulnaris (12.5 Units to 50 Units in 1 site)	
	Flexor digitorum profundus (30 Units to 50 Units in 1 site)	
	Flexor digitorum superficialis (30 Units to 50 Units in 1 site)	
	Adductor pollicis (20 Units in 1 site)	
	Flexor pollicis longus (20 Units in 1 site)	

In treating adult patients for 1 or more indications, the maximum cumulative dose should not exceed 400 Units in a 3-month interval.

BOTOX® Treatment Framework documentation (continued)

4- to 6-week follow-up

The right plan

Percentage of goals achieved:

Improvements:

Patient comments:

Potential adjustments in muscles/BOTOX® dose:

☐ Patient scheduled for next treatment session

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)
Hypersensitivity Reactions
Serious and/or immediate hypersensitivity reactions have been reported. These reactions include anaphylaxis, serum sickness, urticaria, soft-tissue edema, and dyspnea. If such a reaction occurs, further injection of BOTOX® should be discontinued and appropriate medical therapy immediately instituted. One fatal case of anaphylaxis has been reported in which lidocaine was used as the diluent, and consequently the causal agent cannot be reliably determined.

Please see additional Important Safety Information about BOTOX® on following pages.

BOTOX® Treatment Framework documentation (continued)

Injection 2: Muscles injected/BOTOX® dose

The right muscles/dose

Injected	Approved Muscle[18]	BOTOX® Dose
	Gastrocnemius–medial head (75 Units divided in 3 sites)	
	Gastrocnemius–lateral head (75 Units divided in 3 sites)	
	Soleus (75 Units divided in 3 sites)	
	Tibialis posterior (75 Units divided in 3 sites)	
	Flexor hallucis longus (50 Units divided in 2 sites)	
	Flexor digitorum longus (50 Units divided in 2 sites)	
	Biceps brachii (100 Units to 200 Units divided in 4 sites)	
	Flexor carpi radialis (12.5 Units to 50 Units in 1 site)	
	Flexor carpi ulnaris (12.5 Units to 50 Units in 1 site)	
	Flexor digitorum profundus (30 Units to 50 Units in 1 site)	
	Flexor digitorum superficialis (30 Units to 50 Units in 1 site)	
	Adductor pollicis (20 Units in 1 site)	
	Flexor pollicis longus (20 Units in 1 site)	

In treating adult patients for 1 or more indications, the maximum cumulative dose should not exceed 400 Units in a 3-month interval.

BOTOX® Treatment Framework documentation (continued)

4- to 6-week follow-up

The right plan

Percentage of goals achieved:

Improvements:

Patient comments:

Potential adjustments in muscles/BOTOX® dose:

☐ Patient scheduled for next treatment session

Notes

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Increased Risk of Clinically Significant Effects With Pre-existing Neuromuscular Disorders
Individuals with peripheral motor neuropathic diseases, amyotrophic lateral sclerosis (ALS), or neuromuscular junction disorders (eg, myasthenia gravis or Lambert-Eaton syndrome) should be monitored when given botulinum toxin. Patients with known or unrecognized neuromuscular disorders or neuromuscular junction disorders may be at increased risk of clinically significant effects including generalized muscle weakness, diplopia, ptosis, dysphonia, dysarthria, severe dysphagia, and respiratory compromise from therapeutic doses of BOTOX® (see *Warnings and Precautions*).

Dysphagia and Breathing Difficulties
Treatment with BOTOX® and other botulinum toxin products can result in swallowing or breathing difficulties. Patients with pre-existing swallowing or breathing difficulties may be more susceptible to these complications. In most cases, this is a consequence of weakening of muscles in the area of injection that are involved in breathing or oropharyngeal muscles that control swallowing or breathing (see *Boxed Warning*).

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Pulmonary Effects of BOTOX® in Patients With Compromised Respiratory Status Treated for Spasticity
Patients with compromised respiratory status treated with BOTOX® for adult spasticity should be monitored closely.

Bronchitis and Upper Respiratory Tract Infections in Patients Treated for Spasticity
Bronchitis was reported more frequently as an adverse reaction in adult patients treated for upper limb spasticity with BOTOX® (3% at 251 Units to 360 Units total dose) compared to placebo (1%). In adult patients with reduced lung function treated for upper limb spasticity, upper respiratory tract infections were also reported more frequently as adverse reactions in patients treated with BOTOX® (11% at 360 Units total dose; 8% at 240 Units total dose) compared to placebo (6%). In adult patients treated for lower limb spasticity, upper respiratory tract infections were reported more frequently as an adverse reaction in patients treated with BOTOX® (2% at 300 Units to 400 Units total dose), compared to placebo (1%).

Please see additional Important Safety Information about BOTOX® on following pages.

Dilution and reconstitution

Follow general dilution instructions for BOTOX® vials (100 Units and 200 Units)[1]

100-Unit BOTOX® Vial		
0.9% Sodium Chloride* per vial	Dose per 1 mL syringe	Dose per 0.1 mL
1 mL	100 Units	10 Units
2 mL	50 Units	5 Units
4 mL	25 Units	2.5 Units
8 mL	12.5 Units	1.25 Units
10 mL	10 Units	1 Unit

200-Unit BOTOX® Vial		
0.9% Sodium Chloride* per vial	Dose per 1 mL syringe	Dose per 0.1 mL
1 mL	200 Units	20 Units
2 mL	100 Units	10 Units
4 mL	50 Units	5 Units
8 mL	25 Units	2.5 Units
16 mL	12.5 Units	1.25 Units
20 mL	10 Units	1 Unit

*Preservative-free 0.9% Sodium Chloride Injection, USP only.

- The recommended dilution is 200 Units/4 mL or 100 Units/2 mL with preservative-free 0.9% Sodium Chloride Injection, USP (see table above)
- Administer the 200-Unit vial or 100-Unit vial of BOTOX® within 24 hours after reconstitution in the vial
- Unused reconstituted BOTOX® should be stored in a refrigerator (2°C to 8°C) for up to 24 hours until time of use
- BOTOX® vials are for single-dose only. Discard any unused portion
- Unopened vials of BOTOX® should be stored in a refrigerator (between 2°C to 8°C or 36°F to 46°F) for up to 36 months

Reconstitution procedures

Using the reconstitution needle, draw up the proper amount of saline (see Dilution Table) in the appropriately sized sterile syringe. A 21-gauge, 2-inch needle is recommended for reconstitution. Reconstituted BOTOX® should be clear, colorless, and free of particulate matter.

Insert the needle straight into the vial, then tilt the vial at a 45° angle. Slowly inject the saline into the BOTOX® neurotoxin vial. Vacuum is present in the vial, which demonstrates that the sterility of the vial is intact. Do not use the vial if the vacuum does not pull the saline into the vial.

Release the vacuum by disconnecting the syringe from the needle and allowing air to flow into the vial. Gently mix BOTOX® with the saline by moving the vial side to side or rotating the vial.

Draw the fluid into the injection syringe by placing the needle into the bottom corner of the vial for full extraction.

Disconnect the injection syringe from the vial and attach an appropriate needle for injection. A 25- to 30-gauge needle may be used for superficial muscles, and a longer 22-gauge needle may be used for deeper musculature.

IMPORTANT SAFETY INFORMATION (continued)
WARNINGS AND PRECAUTIONS (continued)

Human Albumin and Transmission of Viral Diseases

This product contains albumin, a derivative of human blood. Based on effective donor screening and product manufacturing processes, it carries an extremely remote risk for transmission of viral diseases and variant Creutzfeldt-Jakob disease (vCJD). There is a theoretical risk for transmission of Creutzfeldt-Jakob disease (CJD), but if that risk actually exists, the risk of transmission would also be considered extremely remote. No cases of transmission of viral diseases, CJD, or vCJD have ever been identified for licensed albumin or albumin contained in other licensed products.

Please see additional Important Safety Information about BOTOX® on following pages.

Ensure your office is ready for your first BOTOX® injections

- Set up an Allergan® account for BOTOX® ordering (1-800-811-4148)
- Ensure there is a refrigerator to store BOTOX® vials
- Make sure materials have been ordered:
  - 100- and/or 200-Unit BOTOX® vials
  - 25- to 30-gauge needles for superficial muscles
  - 22-gauge needles for deeper muscles
  - 21-gauge, 2-inch needles for reconstitution
  - 1-mL syringes for injections
  - Appropriately sized syringes for reconstitution
  - Single-use vials of preservative-free, 0.9% sodium chloride (saline)
  - Alcohol swabs for cleaning the rubber stoppers on the saline and BOTOX® vials
  - Adhesive bandages
  - Muscle localization guidance equipment if needed
- Review the BOTOX® reconstitution process
- Confirm insurance plan requirements for scheduled patients to ensure appropriate chart-documentation and prior-authorization steps are met (if required)
- Call to remind patients of their scheduled injections

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS
Adverse reactions to BOTOX® for injection are discussed in greater detail in the following sections: *Boxed Warning*, *Contraindications*, and *Warnings and Precautions*.

Adult Upper Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for upper limb spasticity include pain in extremity, muscular weakness, fatigue, nausea, and bronchitis.

Adult Lower Limb Spasticity
The most frequently reported adverse reactions following injection of BOTOX® for lower limb spasticity include arthralgia, back pain, myalgia, upper respiratory tract infection, and injection-site pain.

Postmarketing Experience
Adverse reactions that have been identified during postapproval use of BOTOX® are discussed in greater detail in Postmarketing Experience (Section 6.3 of the Prescribing Information).

BOTOX ACADEMY®

- Videos and e-lectures on:
  - Injection technique
  - Functional anatomy
  - Muscle localization
  - Reconstitution
- Downloadable patient education and office materials

Register at BOTOXAcademy.com

Find a BOTOX® Specialist tool

- Help patients seeking treatment find your practice by creating a profile
- Injectors can customize their profile with multiple options (eg, name and photo, specialty)

Sign up at BOTOXMedical.com

IMPORTANT SAFETY INFORMATION (continued)
ADVERSE REACTIONS (continued)
Postmarketing Experience (continued)
There have been spontaneous reports of death, sometimes associated with dysphagia, pneumonia, and/or other significant debility or anaphylaxis, after treatment with botulinum toxin. There have also been reports of adverse events involving the cardiovascular system, including arrhythmia and myocardial infarction, some with fatal outcomes. Some of these patients had risk factors including cardiovascular disease. The exact relationship of these events to the botulinum toxin injection has not been established.

Please see additional Important Safety Information about BOTOX® on following pages.

Reimbursement Business Advisor (RBA)

- Works with practices to identify and focus on operational needs (including reimbursement support) that can facilitate the safe and effective use of BOTOX® treatment
- Provides in-person insights regarding BOTOX® office processes from the time the patient is first identified through follow-up care

Ask your Allergan® Representative how an RBA can help

BOTOX® Savings Program

Patients may

PAY as little as $0 for BOTOX® treatments

BOTOX® SAVINGS PROGRAM

Here's how:

- Most insurance plans cover the majority of BOTOX® costs. However, some commercially insured adult patients with spasticity may still owe a co-pay*
- On average, the out-of-pocket cost for BOTOX® for commercially insured patients is $184 per 12-week treatment. There may be additional costs for the procedure, which will vary by healthcare provider and insurance*
- The BOTOX® Savings Program can reimburse eligible patients up to $1000 per treatment to help with these remaining costs*

Patients can text† SAVE to 27747
or visit BOTOXSavingsProgram.com to get started

*Restrictions and maximum savings limits apply. Patient out-of-pocket expense may vary. Offer not valid for patients enrolled in Medicare, Medicaid, or other federal or state healthcare programs. Please see full terms and conditions at BOTOXSavingsProgram.com.

†See Privacy & Terms: BOTOXSavingsProgram.com/eligibility. Message & data rates may apply. Message frequency may vary. Text HELP for help, STOP to end.

IMPORTANT SAFETY INFORMATION (continued)
DRUG INTERACTIONS

Co-administration of BOTOX® and other agents interfering with neuromuscular transmission (eg, aminoglycosides, curare-like compounds) should only be performed with caution as the effect of the toxin may be potentiated. Use of anticholinergic drugs after administration of BOTOX® may potentiate systemic anticholinergic effects. The effect of administering different botulinum neurotoxin products at the same time or within several months of each other is unknown. Excessive neuromuscular weakness may be exacerbated by administration of another botulinum toxin prior to the resolution of the effects of a previously administered botulinum toxin. Excessive weakness may also be exaggerated by administration of a muscle relaxant before or after administration of BOTOX®.

Please see accompanying full Prescribing Information including Boxed Warning and Medication Guide.

BOTOX® Savings Program Terms and Conditions

BOTOX® Savings Program Terms and Conditions

Program Terms, Conditions, and Eligibility Criteria: 1. This offer is good for use only with a valid prescription for BOTOX® (onabotulinumtoxinA). **2.** Based on insurance coverage, each patient can be reimbursed up to $1000 per treatment with a maximum savings limit of $4000 per year. Patient out-of-pocket expense may vary. **3.** This offer is not valid for use by patients enrolled in Medicare, Medicaid, or other federal or state programs (including any state pharmaceutical assistance programs), or private indemnity or HMO insurance plans that reimburse you for the entire cost of your prescription drugs. Patients may not use this offer if they are Medicare-eligible and enrolled in an employer-sponsored health plan or prescription drug benefit program for retirees. This offer is not valid for cash-paying patients. **4.** This offer is valid for up to 4 treatments over a 12-month period. **5.** Offer is valid only for BOTOX® and BOTOX® treatment-related costs not covered by insurance. **6.** A BOTOX® Savings Program check will be provided upon approval of a claim. The claim must be submitted with treatment details from an Explanation of Benefits (EOB) or a Specialty Pharmacy (SP) receipt. (If the BOTOX® prescription was filled by a Specialty Pharmacy, both EOB and SP details must be provided.) All claims must be submitted within 120 days of treatment date. You may be required to provide a copy of your EOB or SP receipt for your claim to be approved. **7.** A BOTOX® Savings Program check may be sent either directly to you or to your selected healthcare provider who provided treatment. For payment to be made directly to your healthcare provider, you must authorize an assignment of benefit during each claim submission. You are not obligated to assign your BOTOX® Savings Program benefit to your healthcare provider to participate in the program. **8.** Allergan reserves the right to rescind, revoke, or amend this offer without notice. **9.** Offer good only in the USA, including Puerto Rico, at participating retail locations. **10.** Void where prohibited by law, taxed, or restricted. **11.** This offer is not health insurance. **12. By participating in the BOTOX® Savings Program, you acknowledge that you are an eligible patient and that you understand and agree to comply with the terms and conditions of this offer.**

For questions about this program, please call 1-800-44-BOTOX.

References:

1. Data on file, Allergan; BOTOX® for Spasticity Conversation Connect Report; 2016. **2.** Data on file, Allergan; BOTOX® NeuroRehab Pulse Wave V, Final Report; 2016. **3.** Swanson M. Implementation of a SMART goal intervention for diabetic patients: a practice change in primary care. *Doctoral Projects.* 2016;paper 10:1-103. **4.** New South Wales Agency for Clinical Innovation. Rehabilitation goal training. Rehabilitation Network: Chatswood, NSW, Australia; 2013. **5.** Bovend'Eerdt TJ, Botell RE, Wade DT. Writing SMART rehabilitation goals and achieving goal attainment scaling: a practical guide. *Clin Rehabil.* 2009;23(4):352-361. **6.** The National Committee for Quality Assurance. Goals to care: How to keep the person in "person-centered." 2016. **7.** Bodenheimer T, MacGregor K, Sharifi C. Helping patients manage their chronic conditions. California HealthCare Foundation: Oakland, CA; 2005. **8.** Van Puymbrouck LH. Promoting client goal ownership in a clinical setting. *OJOT.* 2014;2(2):1-18. **9.** Tinetti ME, Naik AD, Dodson JA. Moving from disease-centered to patient goals-directed care for patients with Multiple Chronic Conditions: Patient value-based care. *JAMA Cardiol.* 2016;1(1):9-10. **10.** Institute for Healthcare Improvement website. Set and document self-management goals collaboratively with patients who have chronic conditions. ihi.org/resources/Pages/Changes/SetandDocumentSelfManagementGoalsCollaborativelywithPatients.aspx. Accessed May 17, 2017. **11.** Reuben DB, Tinetti ME. Goal-oriented patient care–an alternative health outcomes paradigm. *N Engl J Med.* 2012;366(9):777-779. **12.** Randall KE, McEwen IR. Writing patient-centered functional goals. *Phys Ther.* 2000;80(12):1197-1203. **13.** Heisler M. Actively engaging patients in treatment decision making and monitoring as a strategy to improve hypertension outcomes in diabetes mellitus. *Circulation.* 2008;117(11):1355-1357. **14.** Leach E, Cornwell P, Fleming J, Haines T. Patient centered goal-setting in a subacute rehabilitation setting. *Disabil Rehabil.* 2010;32(2):159-172. **15.** Lee J. Helping your patients set achievable goals. *AADE in Practice.* 2015;3(5):42-45. **16.** Parsons JG, Plant SE, Slark J, Tyson SF. How active are patients in setting goals during rehabilitation after stroke? A qualitative study of clinician perceptions. *Disabil Rehabil.* 2016:1-8. **17.** Siegert RJ, Taylor WJ. Theoretical aspects of goal-setting and motivation in rehabilitation. *Disabil Rehabil.* 2004;26(1):1-8. **18.** BOTOX® Prescribing Information, October 2019. **19.** Standring S, ed. *Gray's Anatomy: The Anatomical Basis of Clinical Practice.* 40th ed. London, England: Churchill Livingstone; 2008. **20.** Perotto AO. *Anatomical Guide for the Electromyographer: The Limbs and Trunk.* 4th ed. Springfield, IL: Charles C Thomas Publisher, Ltd; 2005. **21.** Washington University School of Medicine in St. Louis. Peripheral nerve surgery: a resource for surgeons. Extensor pollicis longus. Washington University School of Medicine in St. Louis website. http://nervesurgery.wustl.edu/ap/hand/radial/deepbranch/Pages/ExtensorPollicisLongus.aspx. Accessed 2020. **22.** Odderson IR, ed. *Botulinum Toxin Injection Guide.* New York, NY: Demos Medical Publishing, LLC; 2008. **23.** Richardson M. Muscle atlas: Tibialis posterior. University of Washington website. http://rad.washington.edu/muscle-atlas/tibialis-posterior/. Accessed 2020. **24.** Doney CP, Sexton PJ, Carda JA. Student Practical Assessment Teaching Aid: Foot/ankle/low leg module: Manual muscle testing. Minnesota State University website. http://ahn.mnsu.edu/athletictraining/spata/footanklemodule/manualmuscle.html. Updated September 10, 2015. Accessed 2016.

Helpful phone numbers and websites

BOTOX ACADEMY

ORDERING

AllerganDirect.com or call 1-800-44-BOTOX (1-800-442-6869)

CUSTOMER SERVICE

1-800-44-BOTOX (1-800-442-6869)

ALLERGAN® MEDICAL INFORMATION LINE

1-800-433-8871

PATIENT FINANCIAL ASSISTANCE

For commercially insured patients: BOTOXSavingsProgram.com

PROFESSIONAL EDUCATION & RESOURCES

For injection training opportunities: Contact your Allergan® Representative

For Reimbursement Business Advisors: Contact your Allergan® Representative

For injection and reconstitution videos, plus downloadable patient education and more: BOTOXAcademy.com

Please see Important Safety Information, including Boxed Warning, inside.

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