

PRESCRIPTION FOOTWEAR

Standards of Practice for Chiropodists and Podiatrists

I. Introduction

Prescription footwear is an integral part of patient care for the management of lower extremity pathology and to alleviate pain and dysfunction caused by foot deformities.

The College of Chiropodists of Ontario has developed its Prescription Footwear Standard to meet the needs of the profession and to provide the public of Ontario with safe and effective foot care.

II. Background to Prescription Footwear

There are many different professional and commercial providers of prescription footwear. The assessment, prescription, casting, manufacture, provision and modification of footwear are an integral part of the comprehensive provision of foot care that is unique to the chiropody and podiatry profession. It is this comprehensive array of services provided which gives the public of Ontario efficiencies in both duration of treatment and in financial costs.

III. Custom-Made Orthopaedic Footwear

Footwear made from measurements and a mould (custom-last) of the patient's feet that includes alterations to accommodate or control a deformity, abnormality or dysfunction of the foot or lower limb.

Objectives for custom-made orthopaedic footwear

- To accommodate a deformity or dysfunction while providing support for proper foot function.
- To protect the foot from environmental conditions that the patient is subjected to.

Indications for custom-made orthopaedic footwear

- Structural deformity resulting from congenital, systemic disease, arthritic disease, traumatic injury, asymmetry, or aging
- Dermal abnormality or ulceration resulting from disease, burns, aging
- Hyper allergenic feet
- Post-surgical i.e. triple arthrodesis, hip and knee replacements, low back or spinal complications, and amputations i.e. toes, forefoot
- Peripheral vascular disease
- Severe edema/ lymphedema
- Other associated inflammatory conditions often secondary to *the* above medical problems i.e. anterior/posterior tibial tendonitis (shin splints), patello femoral syndrome, iliotibial band syndrome, peroneal tendonitis
- Unusual environmental conditions
- Failure or less than optimal results from over-the-counter orthopaedic footwear

Prescription of custom-made orthopaedic footwear should include:

- A medical history including the recording of the condition/diagnosis that necessitates the custom-made footwear
- A biomechanical exam with appropriate measurements taken and recorded
- A gait analysis, where possible
- Assessment and recording of the activities and environmental requirements of use
- Specification of materials used for upper, sole, lining and any special features
- Specification of type of footwear prescribed
- A cast of the patient's foot and ankle with plaster, cast sock or 3D digital video imaging

Construction of custom-made footwear

Footwear must be constructed from the prescription and cast, and fabricated from appropriate materials in consideration of the patient's diagnosis, deformity, activities and environmental conditions.

IV. Off-the-Shelf /Over-the-Counter Footwear

Footwear made from standard or specialized lasts but not for a specific individual. The footwear has features that enhance the effectiveness of orthotics or on their own improve biomechanical function or accommodation.

Features of this type of footwear *may include but are not limited to:*

Firm/supportive heel counter
Extra wide toe box
Deep toe box
Retaining medium (laces, buckles, straps)
Shock absorbing sole/ stable sole/ light weight sole
Leather/ breathable upper
Deep heel seat/cup

A. Orthopaedic Footwear

Objectives for off-the-shelf/ over the counter orthopaedic footwear

- To accommodate foot deformity
- To reduce abnormal foot function *and provide support for the foot*
- To enhance the effectiveness of a foot orthoses

Indications for orthopaedic footwear

- The same as for custom-made orthopaedic footwear but the pathologies are typically less severe

Prescription of off-the-shelf/over-the-counter orthopaedic footwear should include

- A medical history including the recording of the condition/diagnosis that necessitates the custom-made footwear
- A foot exam with appropriate measurements taken and recorded
- A gait analysis, *where possible*
- Assessment and recording of any pertinent activities and environmental requirements of use
- Recording of *any required* orthopaedic modifications

Construction of off-the-shelf/ over-the-counter orthopaedic footwear

- Footwear must be made by an acceptable manufacturer of orthopaedic footwear
- Footwear must have an orthopaedic feature or modification that is consistent with the prescription (refer to Appendix 1)

B. Functional/ Motion Control Footwear

Objectives for functional footwear

- To facilitate the optimal performance of a functional foot orthoses
- To improve foot biomechanics

Indications for functional/ motion control footwear

- Severe or unusual pathology that requires special features not common in the majority of footwear.

Prescription of functional/ motion control footwear should include

- Same as over-the-counter orthopaedic footwear
- Recording of the pathology and special feature required

C. Orthopaedic Sandals

Preferably closed back (i.e. with heel counter), otherwise, deep heel cup is strongly recommended. Adjustable strapping is also recommended to maintain good support. Shock-absorbing soles and leather or breathable uppers.

Objectives for orthopaedic sandals

- To accommodate a lesion, foot deformity or abnormality
- To reduce abnormal foot function *and provide support for the foot*
- To improve ventilation

Indications for orthopaedic sandals

- Edema
- Inability to fit in a closed orthopaedic shoe
- Neurological conditions resulting in redness and burning of feet
- Severe digital deformities including hallux abducto valgus, hammer toes, mallet toes and retracted toes.

- Also indicated for indoor use in patients with diabetes, neuropathy and/or arthritis (i.e. rheumatoid arthritis) for protection and proprioception.

V. Delivering Footwear to the patient

1. New footwear should be fitted by the practitioner or a designated staff member to ensure that they meet the prescription, and the structure of the patient's foot.
2. The practitioner or designated staff *member* should provide the following advice/guidelines to the patient in a manner that can be understood by the patient:
 - Guidelines for developing tolerance and acceptance of the footwear
 - Time frames to achieve potential results
 - Ensure that the footwear is appropriate for the patient's:
 - a. condition
 - b. activities
 - c. orthotic devices.
3. The requirements for follow-up to the dispensing of orthopaedic footwear should include:
 - Providing instructions for usage of the footwear
 - Offering a follow-up appointment within a reasonable period of time after dispensing the footwear (such as 3-4 weeks). This should be documented in the patient record. A telephone follow-up would suffice, if the patient does not require or attend a follow-up visit, or possibly the patient could be asked to return an orthopaedic footwear satisfaction form.
 - Advice to the patient regarding the need for periodic long-term check ups.
4. The practitioner should address what the patient may expect regarding the outcomes from the treatment. Although the practitioner cannot guarantee the success of any treatment, a reasonable level of patient satisfaction should be achieved. The practitioner should explain these expectations in advance, both at the time of obtaining consent (prior to casting/measurements for the footwear), and at delivery of the footwear.
5. Each practitioner should have an office policy to deal with client dissatisfaction. While patient non-compliance may contribute to lack of success with orthopaedic footwear, it is the responsibility of the practitioner to attempt to work with the patient to achieve positive results and compliance.

VI. Conclusions

The College of Chiropractors of Ontario has developed its Orthopaedic Footwear Standards of Practice to reflect current knowledge of footwear management. Within the context of a constantly evolving information base, practitioners are encouraged to continually evaluate their footwear prescription strategies and procedures. In this way, the profession can ensure that patients are achieving the most positive health outcomes

possible, and that chiropodists and podiatrists are competent providers of orthopaedic footwear.

The prescribing of footwear is a recommendation that the footwear is medically necessary. The prescription is based on a thorough assessment and consideration of occupational, lifestyle, biomechanical and environmental factors. The features or modifications must be consistent with those generally accepted in the orthopaedic community.

VII. Glossary/Additional Information

Boot

Footwear in which the foot is fully enclosed and the quarters extend proximal to the ankle.

Custom-made

Footwear made from a mould (last) of the patients feet. The upper and/or the midsole will have the shape of the foot.

Orthopaedic

Footwear that incorporates one or more of the accepted orthopaedic modifications as per the list in Appendix 1.

Off the Shelf

Footwear which is mass-produced from standard size lasts. They are sold over the counter (OTC).

Sandal

Footwear in which the upper is modified with cut outs or replaced with a series of straps to hold the foot into place. The purpose is to improve ventilation, accommodate a lesion, deformity or abnormality.

Shoe

The generic term for footwear, for the purpose of this standard will mean, Footwear that fully encloses the foot. It is comprised of an upper, midsole and an outsole.

Appendix 1

ORTHOPAEDIC FOOTWEAR MODIFICATIONS

May include, but are not limited, to the following:

- Extra width
- Extra depth
- Extended heel counter
- Reinforced heel counter
- Thomas heel
- Reverse Thomas heel
- Buttress heel
- Sach heel
- Stone heel
- Straight last
- Reverse last
- Rocker sole
- Balloon patch
- Foot lift
- Heel lift
- Medial/Lateral flare
- Excavations
- Shoe stretching
- Padding inside shoes- i.e. heel counters, tongue, heel grip, arch pads, morton's extensions
- Cushioned tongue pad

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