

Foot care can prevent mobility problems and social isolation; it is a crucial part of nursing care, particularly for older patients, who may be unable to care for their own feet

# Foot assessment and care for older people

## Learning points...

- › Why older people's feet should be regularly assessed
- › How to provide foot care
- › When to refer patients for specialist assessment

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Nursing and healthcare literature about foot care focuses predominantly on people who have diabetes. There is a lack of clarity about which health and social care professionals should provide foot care to patients who can no longer manage to carry out this activity of daily living but do not have diabetes.

This article explains why patients may no longer be able to look after their own feet and aims to give health professionals guidance on foot problems, assessment and care, and advise them on when it is appropriate to refer patients for specialist advice.

Foot problems can have a negative impact on many aspects of health and wellbeing, particularly if they compromise mobility and ability to undertake activities of daily living. The important role of feet in balance and mobility means they have a complex structure (Box 1) that puts them at risk of a range of problems. Maintaining foot health can, therefore, have a positive effect on general health and wellbeing (Woodrow et al, 2005).

Looking after patients' feet is part of holistic nursing care and gives health professionals an opportunity to establish a therapeutic relationship with their patient by offering them one-to-one time to discuss patients' concerns and needs.

Good foot care can have a range of

benefits (Department of Health, 2009; Age Concern, 2007), including:

- › Reducing pain – painful feet can impair balance and functional ability;
- › Increasing mobility and physical activity – foot problems are a major cause of walking difficulties in older people;
- › Increasing self-esteem;
- › Increasing social contact and participation in leisure and cultural activities;
- › Reducing risk of trips and falls – foot pain can cause people to wear loose footwear, which can contribute to falls.

While foot problems can occur in all age groups, their prevalence increases with age. It is estimated that 80% of older people have foot problems (Harvey et al, 1997); some such problems are fairly common (Box 2), but the prevalence of serious foot problems, such as peripheral arterial disease, does increase with age (Campbell, 2006).

Some age-associated foot problems may, in themselves, seem relatively minor; however, but if unattended such problems can lead to more serious issues. For example, 31% of older people are unable to cut their own toenails because they:

- › Can no longer reach their toenails;
- › Are unable to handle nail clippers due to arthritis;
- › Have conditions that make them feel dizzy if they bend;
- › Have visual impairment;
- › Have toenails that have become too thick to cut (Age Concern, 2007).

Those who are unable to perform this essential task for themselves need regular assessment and care to help prevent adverse effects from occurring.

## 5 practice points

**1** Many older people are unable to care for their own feet

**2** More than three-quarters are thought to have foot problems and about a third are unable to cut their own toenails

**3** Good foot care can have a positive effect on overall health and wellbeing

**4** Age Concern (now Age UK) recommends that health and social care staff are able to provide basic foot care and know when to refer on to specialists

**5** Patients should have their own nail clippers and their own nail file



Good foot care leads to many benefits

### BOX 1. STRUCTURE OF THE HUMAN FOOT

- Each foot contains 26 bones and more than 100 ligaments
- Feet contain more than a quarter of all the bones in the body
- The skin on the feet has more than 7,000 nerve endings
- There are more than 125,000 sweat glands on each foot - more than there are anywhere else in the body
- Feet produce about 250ml of sweat each day

Source: NHS Choices (2013)

FIG 1. CALLUSES



FIG 2. INGROWING TOENAIL



### Age-related changes

A range of common foot problems are associated with different aspects of the ageing process.

### Skin

Ageing skin tends to become dry and inelastic, with a loss of the underlying fatty tissue that is important for protecting bone and soft tissue; as a consequence painful calluses (Fig 1) are more likely to occur. Dryness that is associated with reduced blood flow may cause the skin to split, resulting in painful fissures, while poor circulation may lead to a higher risk of infection if the skin is broken.

### Nails

Toenails can thicken and become hard and brittle with age, which makes it difficult to cut them. Continuous pressure from inappropriate footwear can also cause more extreme nail deformity. Nails that become too long or thickened can damage the skin on adjacent toes.

Ingrowing toenails (Fig 2) occur when a nail grows into the skin, and can cause pain, swelling, redness and infection. They can be caused by:

- » Cutting nails too short;
- » Failing to ensure nails are cut straight across;
- » Injury to the nail;
- » Tight shoes.

### Shape

Foot width and length often both increase with age; in addition, the feet may swell with oedema during the day (Woodrow et al, 2005). Arthritis, inherited deformities and previous trauma can also cause feet to change shape. Bunions and misshapen toes can lead to pressure sites where corns (Fig 3) and calluses develop (Society of Chiropodists and Podiatrists, 2010).

A bunion is a bony deformity of the joint at the base of the big toe; it can lead to the big toe pointing inwards (Fig 4). Corns and calluses are areas of hard skin on the feet caused by excessive pressure or shoes rubbing. Corns are usually small and circular. Hard corns tend to develop on the bumpiest parts of the foot and soft corns develop between the toes where sweat keeps them moist. Calluses are wider and less well defined, and often develop on areas that take the most weight, such as the ball of the foot.

### Infection

Fungal infection of skin, such as athlete's foot - which causes peeling, redness, itching, burning and sometimes blisters and sores (Fig 5) - is common in older people. It can spread to the toenails and cause cracks or maceration between the toes (Dunn et al, 2004).

Fungal nail infections occur when

microscopic fungi enter the nail through a break; they result in thick, discoloured and brittle nails (Fig 6).

### Foot assessment

When older people can no longer manage their own foot care, an initial assessment is required to identify what help they need with this activity of daily living. Depending on local services and policies, a range of appropriately trained health and social care workers may carry out the assessment, including nurses, healthcare assistants and volunteers. In some areas podiatrists assess all new nursing home residents while in others, health or social care professionals carry out a telephone assessment or clients are seen in person, either in their own homes or at a clinic (Age Concern, 2007).

After an individual has been assessed, care may be provided by:

- » Podiatrists;
- » Foot care assistants, who are part of the podiatry team (DH, 2009);
- » Trained health and social care staff;
- » A combination of these.

Age Concern (2007) recommends that staff in care homes and hospitals, and those providing care in people's own homes, should be able to provide basic foot care, such as nail cutting, and understand when to refer clients on for specialist treatment.

### Guide to foot care

The DH (2009) describes foot care as the following:

- » Toenail cutting;
- » Skin care;
- » Footwear advice;
- » Prevention advice;
- » Signposting to podiatrists and other health professionals.

### BOX 2. COMMON FOOT PROBLEMS IN OLDER PEOPLE

- Toenail disorders including hardened or ingrown nails
- Toe deformities such as overlapping toes
- Corns and calluses
- Bunions
- Fungal infections

FIG 3. CORNS



#### Essential care

Certain practices should be followed in order to provide essential foot care, including:

- » Ideally, feet should be washed every day;
- » They should be well dried, especially between the toes;
- » Talcum powder should not be used on the feet as this can clog the skin and cause friction between the toes;
- » Socks or stockings should be changed every day;
- » Moisturising cream should be applied every day, avoiding the area between the toes, which may become too moist and split;
- » Footwear should be reviewed to assure both the safety and stability of the individual;
- » Patients should be encouraged to wear comfortable, well-fitting and supportive shoes rather than slippers (Woodrow et al, 2005) (Box 3).

#### Cutting toenails

Equipment necessary for cutting toenails includes nail clippers and a nail file. To prevent cross infection all patients should have their own equipment (Woodrow et al, 2005), just as they would have their own toothbrush. The equipment should be cleaned with detergent and dried after use. Practice points include:

- » Toenails are best cut after a bath when the nails are slightly softer and easier to cut;
- » Use a pair of nail clippers to cut straight across (do not cut nails too short or cut down the sides);
- » Gently file away any rough or sharp edges using a nail file, large emery board or foot file.

#### Foot care for pleasure

Foot care is not only part of daily personal hygiene needs, but also can be an enjoyable experience. For people with advanced dementia, who have been assessed as benefiting from sensory activities (Pool, 2007), a foot spa and gentle massage can be beneficial. A London nursing home introduced regular foot care sessions as part of a structured activity programme, sometimes with unexpected results (Box 4). Individual foot spas/plastic bowls should be provided, and feet should not be soaked for too long to avoid drying the skin.

#### Specialist referral

Referrals should be made to podiatrists, GPs, or pharmacists (for medication review) if patients have:

- » Medical complications that put feet at risk, such as diabetes with peripheral vascular disease, significant peripheral arterial disease without diabetes, painful deformity due to rheumatoid

arthritis or neurological conditions such as stroke and Parkinson's disease (Society of Chiropractors and Podiatrists, 2010);

- » Medications that compromise peripheral circulation and/or tissue viability, such as steroids or anticoagulants;
- » Painful foot lesions, including severe deformities and toenails that are excessively thickened and cause pain, prevent mobility or are a risk to surrounding skin;
- » A history of current or past foot ulcers;
- » Any changes such as the onset of pain, or infection.

#### People with diabetes

It is estimated that 15-20% of people with diabetes will develop a foot ulcer in their lifetime (DH, 2001; Frykberg et al, 1998). Effective management of foot disease in diabetes requires effective multiprofessional working (Society of Chiropractors and Podiatrists, 2010), and nurses are well-placed to coordinate the care required.

The National Institute for Health and Care Excellence (2004) recommends an annual foot check and risk assessment for everyone with diabetes. A routine assessment includes identifying:

- » Loss of sensation and abnormal build-up of calluses;
- » Reduction in arterial blood supply to the foot (no foot pulses, signs of tissue ischaemia);
- » Deformities or foot problems that may put the foot at risk (bony deformities, dry skin, fungal infection);
- » Other factors that put the foot at risk

#### BOX 3. FOOTWEAR ADVICE

- Some footwear can increase the risk of slips, trips and falls, such as slippers, shoes with high heels or with no tread, and badly fitting shoes
- Older people should be advised about the importance of wearing well-fitting shoes to reduce the risk of falls
- Shoes can help with walking and gait if they have:
  - A high back to support the ankle
  - A hard, slip-resistant sole
  - Heels that are less than one inch high
- Specialist shoes, such as those with Velcro fastening, should be considered, especially for feet that are swollen

Source: Age UK (2013)

FIG 4. BUNION



FIG 5. ATHLETE'S FOOT



(reduced capacity for self-care, impaired renal function, poor diabetes control, cardiovascular or cerebrovascular disease) (Diabetes UK et al, 2011).

Diabetes UK (2013) suggests all health professionals caring for people with diabetes should:

- » Know how to carry out foot checks;
- » Inform people of their risk status;
- » Know how to refer appropriately.

There is a common belief that the foot care of all patients with diabetes should be undertaken by podiatrists. However, if the initial assessment shows that their feet have no ulcers or lesions and their diabetes is well controlled, appropriately trained carers can provide the foot care, subject to local policies and procedures, and referring to the diabetic foot care team when necessary. Patients with diabetes who have an increased risk must have an expert assessment carried out by health professionals with specialist experience in the management of the foot in diabetes. Registered nurses should know to who to refer and should ensure a timely referral is made and response given.

### Conclusion

There is considerable confusion about whether nurses can provide essential foot care such as toenail cutting. Foot care is

part of an individual's daily hygiene routines and nurses have an important role in ensuring patients receive it.

Patients with diabetes need an initial risk assessment but if their diabetes is well controlled and they have no foot complications, care can be delivered by non-specialist professionals who have the appropriate training. **NT**

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### BOX 4. CASE STUDY

Nayan Patel\* is 91 years old and lives in a nursing home. He has advanced dementia and refuses to sleep in bed at night, instead spending all night in an armchair. As a result his lower legs are oedematous.

A care worker offered Mr Patel a foot spa, in which his feet would be soaked in warm water then massaged with moisturising cream; he accepted the offer and seemed to enjoy the experience. Mr Patel was sufficiently relaxed afterwards that when the care worker suggested he lay on his bed, he agreed and slept until supper time, then went to bed again afterwards. He not only enjoyed the spa, but also slept well in bed, while the oedema of his lower legs improved.

Although this did not happen on a regular basis, it is clear that Mr Patel associated the foot massage with something good and was always keen to take part.

The patient's name has been changed

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FIG 6. FUNGAL NAIL INFECTION



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