Chiropodist-podiatrist consultations for preventing foot lesions in diabetics

Summary document

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THE TEAM

The full assessment report (in French) can be downloaded from the HAS website (www.has-sante.fr). It was validated by the HAS Board in July 2007.

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Introduction

Foot lesions are a frequent, serious and costly complication of diabetes. The procedures performed by chiropodist-podiatrists to prevent these lesions are not included in the General Nomenclature of Medical Procedures (NGAP). HAS decided to assess these procedures in order to issue a companion document to the Long-term conditions guide on diabetes-related complications.

Assessment method

The assessment was based on a critical appraisal of the literature and on expert opinion (a working group of healthcare professionals and peer reviewers).

Results of the critical appraisal of the literature

Literature retrieved and analysed

A literature search of 4 databases (Medline, The Cochrane Library, National Guideline Clearinghouse and HTA Database; until Apr. 2007) retrieved 178 articles, of which 84 were analysed.

Studies meeting the following criteria were selected:
- guidelines or health technology assessment reports presenting the content, frequency or duration of chiropodist-podiatrist consultations for preventing foot lesions in diabetic patients
- randomised controlled trials (RCTs) assessing the impact of chiropodist-podiatrist preventive consultations on the incidence of foot lesions in diabetic patients.

Nine guidelines (including 8 based on a literature review and expert opinion), 2 Cochrane reviews, and 2 RCTs (621 patients) met these criteria.

Role of the chiropodist-podiatrist

The 9 guidelines either mentioned a chiropodist-podiatrist (in 5 cases) or emphasised the need for multidisciplinary management. According to 4 guidelines, which addressed the role of the chiropodist-podiatrist, this professional is a member of the multidisciplinary team involved in the preventive management of diabetic patients.

The grading of level of risk on foot assessment is given in Table 1.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No sensitive neuropathy</td>
</tr>
<tr>
<td>1</td>
<td>Isolated sensitive neuropathy</td>
</tr>
<tr>
<td>2</td>
<td>Sensitive neuropathy associated with arteriopathy of the lower limbs and/or deformity of the foot</td>
</tr>
<tr>
<td>3</td>
<td>History of ulceration or amputation</td>
</tr>
</tbody>
</table>

A chiropodist-podiatrist should always be consulted from grade 2 onwards according to 2 guidelines based on a literature review (including one from France).

Content of the consultations

Nine guidelines differentiated 5 steps in the management of the diabetic patient's foot:
1. examination of the foot and grading of the podiatric risk
2. chiropody-podiatry treatment
3. patient education
4. assessment of footwear
5. fitting suitable footwear, if necessary.

There was no difference in the content of consultations for grade 2 and 3 patients.

Guidelines in France stipulate that the task of grading the podiatric risk is the responsibility of
the doctor and that it must be supplemented by a podiatric assessment.

Duration of consultations
None of the guidelines specified the duration of the consultations for preventing foot lesions
in diabetic patients.

Frequency of consultations
There was no consensus as to the frequency of the consultations for preventing foot lesions
in diabetic patients. Depending upon the guideline, the interval between two consultations
ranges from 1 to 6 months for grades 2 and 3 patients (or for the equivalent level of risk, “high risk”).

Impact of consultations
The impact of chiropodist-podiatrist consultations in preventing foot lesions in diabetic
patients on morbidity was evaluated in 2 RCTs (n=621 patients) and 2 Cochrane reviews
(n=13 RCTs). These studies highlighted the positive impact of education and primary and
secondary preventive care and suggested a positive impact from the use of orthopaedic
soles/corrective shoes.

No study on the impact of variations in the frequency and duration of podiatrist consultations
was found.

Opinion of the working group and peer reviewers
Ten professionals (5 diabetes specialists, 1 GP, 2 chiropodist-podiatrists, 1 dermatologist, 1
infection specialist) took part in the working group that prepared the long-term condition
guide. Four other professionals were invited to peer review the assessment report (2
diabetes specialists and 2 chiropodist-podiatrists).

Role of the chiropodist-podiatrist
Chiropodist-podiatrists provide the prevention consultations for grade 2 and 3 patients. They
are part of the multidisciplinary team providing yearly follow-up of patients with a grade 3
podiatric risk.

Content of the consultations
The content of the initial assessment and annual workup should be distinguished from that of
follow-up consultations (Table 2).
Table 2. Content of initial assessment and follow-up consultations

<table>
<thead>
<tr>
<th>Initial assessment</th>
<th>Follow-up consultations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check that patient’s podiatric risk status (presence of arteriopathy or not) has</td>
<td>• Provide chiropody treatment (nails, hyperkeratosis)</td>
</tr>
<tr>
<td>been clearly established by the referring doctor or diabetes specialist. If the chiropodist-podiatrist grades risk, this information must be passed on to the doctor in charge</td>
<td>• Inform about podiatric preventive measures</td>
</tr>
<tr>
<td>• Look for morphostatic problems</td>
<td>• Evaluate compliance with treatment Manufacture orthopaedic soles and correct biomechanical abnormalities, if necessary</td>
</tr>
<tr>
<td>• Assess level of podiatric education of patients and families, and ability to examine own foot</td>
<td>• If wound present, refer patient to doctor in charge or diabetes specialist for early treatment</td>
</tr>
<tr>
<td>• Advise on whether orthopaedic soles or orthoplasties are indicated</td>
<td></td>
</tr>
<tr>
<td>• Provide advice on footwear</td>
<td></td>
</tr>
<tr>
<td>• Provide care for nails and hyperkeratosis</td>
<td></td>
</tr>
</tbody>
</table>

Duration of consultations
The initial assessment should last between 30 and 45 minutes.

Frequency of consultations
Podiatric consultations should be held every 2 months for grade 2 patients and at least every 2 months for grade 3 patients. Chiropodist-podiatrists may also see grade 1 patients.

Technical facilities
No special technical facilities are required for holding prevention consultations. They can take place at the practice, as part of a network, or in another type of establishment.

Training
Chiropodists-podiatrists should receive more training on prevention of foot lesions in diabetic patients during their studies and be offered compulsory continuous medical education on the subject.

Data to be collected
The impact of prevention consultations could be measured (before-after measurements) on the basis of French National Health Insurance (NHI) data (frequency of amputations, number of hospital admissions and length of stay, frequency of sick leave).

Target population
The target population includes all diabetic patients with a grade 2 or 3 foot risk and is estimated at 243,000 (data from the Ecodia study and French NHI).
Conclusions

On the basis of the literature review and the experts’ opinion, HAS was in favour of coverage by French NHI of podiatric prevention consultations (education, primary and secondary prevention care) for diabetic patients presenting with grade 2-3 foot lesions. Its clinical benefit was considered to be significantly greater than providing no podiatric care as it is:
- a serious, frequent disease
- a public health priority
- a need that has not been met
- an item in the preventive management of diabetic patients.

Impact measurements have established a benefit of chiropody-podiatry care on morbidity (reduced number of amputations, cases of recurrent ulceration, and cases of callosities other than on the heels, etc.).

The content of the consultations should be:
- examination of the foot and grading of the podiatric risk
- chiropody-podiatry treatment
- patient education
- assessment of footwear
- fitting suitable footwear, if necessary.

The consultation lasts from 30 to 45 minutes.

Frequency of consultations: grade 2 patients, every 2 to 3 months; grade 3 patients, at least every 2 months.

Studies are needed in France to measure the impact of consultations (frequency of amputations, hospital admissions (including length of hospital stay), and sick leave).