and duration by 826 (69.8%) of all patients; methotrexate was used by fewer than half of the patients (531, 44.4%). Response to phototherapy was insufficient in 79.0% of all cases. In contrast, ciclosporin and methotrexate had side-effects or were contraindicated in more than 65% of the patients. The relatively infrequent use of ciclosporin and methotrexate may have resulted from the fact that many patients actually did receive these therapies, but did not completely fulfill the required criteria for dosage and treatment duration. Remarkably, methotrexate was used by fewer than half of the patients. This may be due the fact that patients did not reach the required dosage of 22.5 mg per week, because of side-effects at lower dosage. Furthermore, many patients with psoriasis requiring systemic treatment may be successfully treated with methotrexate, and consequently do not need biological therapy.

In total, 1254 (94.5%) of all initial treatment applications and 812 of all follow-up applications were approved by LABAG. This validates the conclusion that dermatologists are familiar with the demanded criteria for reimbursement of biological therapies. The remaining 442 follow-up applications were not received or were rejected, mainly as a result of a < 50% decline in PASI at week 12.

A PASI 50 response at week 12 was achieved by 69.0% of all patients with an approved initial treatment application for etanercept, and by 50.0% of all patients with an approved initial treatment application for efalizumab. These results are slightly lower than randomized controlled trial data (etanercept 76%, efalizumab 55%), but are comparable with the results of daily practice cohort studies, in which the efficacy of etanercept and efalizumab treatment in daily practice were evaluated.

The mean reduction in PASI relative to baseline at week 12 was 53.1% for etanercept, compared with 35.5% for efalizumab, after carrying forward the baseline PASI to week 12 in cases of missing follow-up PASI. When analysing only ‘responding’ patients, i.e. patients with approved initial and follow-up applications, mean reduction in PASI relative to baseline was 75.0% and 68.3% for etanercept and efalizumab, respectively (Table 2). However, in the first analysis treatment efficacy is underestimated, whereas the second analysis leads to an overestimation of treatment efficacy. The real values should be in between the results of both analyses.

Three times more applications were received for etanercept than efalizumab. Apparently, dermatologists have a preference for etanercept as first-choice biological therapy. The fact that etanercept is approved for the treatment of psoriatic arthritis as well, whereas efalizumab is not, might account for this. Furthermore, according to the presented data, the efficacy of etanercept is superior to that of efalizumab. However, the presented data are unsuitable for objective comparison between etanercept and efalizumab.

The present analysis demonstrates that, as a consequence of strict adherence to reimbursement criteria, only 0.4% of Dutch patients with psoriasis are treated with etanercept or efalizumab. The question arises whether it is indicated to broaden these criteria, in particular considering the long-term and presumably safe control of psoriasis by biologics.

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References

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Hidradenitis suppurativa: are tumour necrosis factor-α blockers the ultimate alternative?

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Sir, In the February 2008 issue of this Journal, Mekkes and Bos evaluated the long-term efficacy of a single course of three infliximab infusions at 5 mg kg<sup>−1</sup> in 10 patients affected by hidradenitis suppurativa (HS). These authors suggested that infliximab can be an effective treatment in severe HS, leading to reduction of symptoms for a prolonged period. In our opinion, infliximab does offer an improvement in quality of life, but long-term efficacy is quite variable. Moreover, they used the scoring system proposed by Sartorius et al., which is very difficult to apply in severe HS, as the lesions (comedones, nodules, fistulas and scars) tend to coalesce, making the number impossible to determine.

In 2004 we began to use infliximab for severe HS at 5 mg kg<sup>−1</sup> at weeks 0, 2 and 6 and every 8 weeks thereafter.
in combination with once-weekly methotrexate 7.5 mg. Follow up-visits were scheduled every 2 weeks during the first 6 weeks and every 4 weeks thereafter. The extent of the disease and its severity were assessed by measurement of the area involved and by the use of two visual analogue scales (VAS) that score pain and discharge on scales from 0 (absent) to 4 (very severe) (Table 1). In addition, all patients completed a Dermatology Life Quality Index (DLQI) questionnaire. To date, we have treated seven patients (four men and three women; mean age 404 years, range 35–46) affected by severe HS, all of whom were resistant to previous systemic and surgical therapies. Table 1 summarizes the clinical histories. In contrast to demographic data from previous reports, three patients in our study had a body mass index \( \geq 35 \) kg m\(^{-2}\) and only three were smokers.

The mean number of infliximab infusions was 94 (range 4–14) and the mean treatment duration was 586 weeks (range 4–72). Patient 1 received 14 infusions in 70 weeks; however, the onset of new lesions at week 74 led us to switch therapy, first to adalimumab and then to etanercept (Fig. 1). Emergence of new lesions was also noticed in patients 2 and 6 after 56 and 60 weeks, respectively. Patient 4 suspended the treatment after the fourth infusion because of an adverse drug reaction. Patients 2, 3, 5 and 7 suspended therapy because no further improvements were seen.

After discontinuation, all patients were evaluated every 4 weeks by measurement of the affected body areas and administration of the DLQI and VAS to assess pain and discharge. Mean follow-up time was 119 weeks (range 114–122). After 3 months the mean pain reduction was 96.2%, the mean discharge reduction was 69.5%, the mean area reduction was 7% and the mean DLQI improvement was 52%. Improvement began to decrease linearly over time. After 24 months the mean pain reduction was 34.8%, the mean discharge reduction was 30.5%, the mean area reduction was 12.5% and the mean DLQI reduction was 14.7%.

Mekkes and Bos evaluated the 1-year efficacy of three infliximab infusions. After 1 year all patients showed improvements in average acne score, C-reactive protein levels and mean DLQI scores. Our patients received a longer course of infusions (mean 94) and a longer follow-up (mean 119 weeks), yet infliximab efficacy decreased in all patients between months 3 and 24. Moreover, in three patients (patients 1, 2 and 6) new lesions emerged during therapy.

Infliximab was used for the first time in 2001 for Crohn disease, and the treatment produced an excellent response in concomitant HS. Favourable results of infliximab treatment for HS have been reported in patients both with and without Crohn disease, although only two case reports had a 2-year follow-up. Few reports include quantitative measures for HS severity, making comparison with our results difficult. In our series of seven patients we have described the longest follow-up reported to date for infliximab treatment of HS.

Several investigators have reported that infliximab is an effective treatment in severe HS, leading to reduction of symptoms for periods ranging from 1 to 12 months. By contrast, variable and partial responses were seen that were not

---

**Table 1 Patient history, extent and severity indices before therapy**

<table>
<thead>
<tr>
<th>Patient</th>
<th>Sex/age (years)</th>
<th>Affected areas</th>
<th>Duration (years)/smoker</th>
<th>BSA (%)/area (cm(^2))</th>
<th>Discharge (0–4)(^a)</th>
<th>Pain (0–4)(^a)</th>
<th>DLQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M/35</td>
<td>Axillae, groins, perianal, intergluteal, anterior thorax</td>
<td>15/yes</td>
<td>15/2421</td>
<td>4</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>M/45</td>
<td>Axillae, groins, perianal, intergluteal</td>
<td>18/yes</td>
<td>8/693</td>
<td>3</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>M/41</td>
<td>Axillae, groins, perianal, intergluteal</td>
<td>23/no</td>
<td>7/493</td>
<td>3</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>F/42</td>
<td>Axillae, groins, perianal, intergluteal</td>
<td>20/yes</td>
<td>8/817</td>
<td>3 (premenstrual exacerbation)</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>M/36</td>
<td>Axillae, groins, perianal, intergluteal</td>
<td>11/yes</td>
<td>5/466</td>
<td>4</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>6</td>
<td>F/38</td>
<td>Axillae, intergluteal</td>
<td>16/no</td>
<td>4/349</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>F/46</td>
<td>Axillae, groins, intergluteal</td>
<td>17/no</td>
<td>5/398</td>
<td>3 (premenstrual exacerbation)</td>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

\(^a\)0 (absent) to 4 (very severe). BSA, body surface area; DLQI, Dermatology Life Quality Index.

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![Fig 1. Patient 1 at week 74, following 14 infusions in 70 weeks. The onset of new lesions led us to switch therapy to adalimumab.](image-url)
sustained during follow-up in a group of seven patients followed for 10 weeks and a group of four patients followed for 1 year.1,9 Our results confirm these latter findings by showing that consecutive courses of infliximab for treatment of HS provide initial improvement with variable results but show decreased efficacy over long-term treatment.

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References


Key words: hidradenitis suppurativa, infliximab, tumor necrosis factora

Conflicts of interests: none declared.

<table>
<thead>
<tr>
<th>Age at first visit</th>
<th>Sex</th>
<th>Location</th>
<th>Histology</th>
<th>Other anomalies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2   months</td>
<td>F</td>
<td>Left</td>
<td>Not operated</td>
</tr>
<tr>
<td>2</td>
<td>14 years</td>
<td>M</td>
<td>Right</td>
<td>Dermal sinus</td>
</tr>
<tr>
<td>3</td>
<td>1 month</td>
<td>F</td>
<td>Left</td>
<td>Dermal sinus</td>
</tr>
<tr>
<td>4</td>
<td>10 years</td>
<td>F</td>
<td>Left</td>
<td>Dermal sinus</td>
</tr>
<tr>
<td>5</td>
<td>1 year</td>
<td>F</td>
<td>Left</td>
<td>Dermal sinus</td>
</tr>
<tr>
<td>6</td>
<td>5 months</td>
<td>F</td>
<td>Left</td>
<td>Dermal sinus</td>
</tr>
<tr>
<td>7</td>
<td>3 months</td>
<td>F</td>
<td>Right</td>
<td>Not operated</td>
</tr>
</tbody>
</table>

Table 1 A summary of our seven patients with congenital peristernal dermal sinuses

Congenital peristernal dermal sinuses: a new entity?

Sir, Congenital dermal sinuses, including periauricular sinuses, spinal dermal sinuses and nasal dermoid sinuses, are sometimes encountered. Dermal sinuses have also been described in every region of the scalp, including the occipital region1,2 and the frontotemporal region.3 However, congenital peristernal dermal sinuses are extremely rare. To the best of our knowledge they have not been reported in the English language literature. We present seven patients with congenital dermal sinuses in the peristernal region (Table 1, Fig. 1). All the lesions were detected at birth. Probing of all cases revealed a subcutaneous tract. In five of the seven cases, the lesions were extirpated and surgical exploration showed a blind-ended tract ending at the fascial layer of the pectoralis major muscle. We describe a representative case.

A 10-year-old Japanese girl (patient 4 in Table 1) with a punctum in her left anterior thoracic wall was referred to our department (Fig. 2a). Her parents noticed the punctum at birth. The punctum was located at the intersection of the left parasternal line and the left first intercostal space. She was clinically well and asymptomatic. Ultrasoundography revealed a subcutaneous tract extending toward the pectoralis major muscle (Fig. 2b). Therefore, we diagnosed it as a sinus and excised it after staining with a blue dye. Surgical exploration disclosed a blind-ended sinus ending at the fascia of the pectoralis major muscle (Fig. 2c,d). Histopathological examination showed that the lesion was lined by keratinized squamous epithelium. Numerous hair follicles, in varying stages of development, were observed in the sinus wall (Fig. 2e,f). The lesion was diagnosed histologically as a dermal sinus. The postoperative course was uneventful.

Dermal sinuses of the trunk are rare. We found only one Japanese article about cases resembling ours.4 The clinical and histological findings in those cases were similar to ours, and therefore all lesions seem to belong to the same pathological entity. In that Japanese article, the lesions were diagnosed as ‘congenital dermoid fistula of the anterior chest region’. However, ‘peristernal dermal sinus’ is a more appropriate term as the lesions are blind-ended and are not connected to two epithelium-lined surfaces. In addition, a similar lesion in the back associated with spinal dysraphism was termed ‘spinal dermal sinus’.5

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