Occipital neuralgia is a headache resulting from dysfunction of the occipital nerves. Medically resistant occipital neuralgia is treated by greater occipital nerve injection, which is traditionally performed by neurologists. A nurse-led clinic was developed to try to improve the service. Patient feedback showed that the clinic was positively perceived by patients, with most stating the nurse-led model was more efficient than the previous one, which had been led by consultants.

In addition to the pain and difficulties they cause to patients, headaches have a significant economic impact on the UK. They account for 4% of all primary care consultations and 35% of all neurology outpatient consultations (National Institute for Health and Care Excellence, 2010), and are estimated to cost the around £2bn each year. Migraine affects 18.3% of females and 7.6% of males in England, totalling an estimated 8 million people (Steiner et al, 2003). As the largest profession in the health sector, nurses can play a vital role in reducing the impact of headaches as innovative methods of care provision are developed to reduce these costs.

Occipital neuralgia is a debilitating type of chronic headache that arises due to damage or entrapment of the greater or lesser occipital nerves. It is characterised by intermittent or persistent pain, which is felt in the back of the head or neck. If the condition is unresponsive to preventative medications it is treated by corticosteroid injection into the greater occipital nerve.

Greater occipital nerve injection (GONI) has been used for many years to manage occipital neuralgia. Although relatively few controlled or blinded clinical studies have been undertaken (NICE, 2010), GONI is often used in the clinical management of primary headache disorders (Haynes et al, 2008; Lipton et al, 2007; Horne et al, 2005). Its use to manage occipital neuralgia has historically been performed by consultant neurologists. This article presents patient feedback on a nurse-led GONI clinic.

Nurse-led clinics
Over the last 10 years there has been an emergence of nurse-led specialist clinics globally, which has been most marked in the UK, Australia, Canada and the US (Chin et al, 2011). Nurse-led outpatient services have been successfully shown to reduce health costs without compromising quality of care (Laurant et al, 2005), while numerous studies have demonstrated that patients with long-term conditions experience greater satisfaction engaging with such services, as opposed to the traditional consultant-led models (Dodd et al, 2014; Markle-Reid et al, 2014; Ndosi et al, 2014).

Currently, nurses have a key role in the outpatient management of many long-term conditions (Box 1) while, within neurology, advanced nurse practitioners are integral to the outpatient management of:

- Epilepsy (Ridsdale et al, 2013);
- Parkinson's disease (Gow et al, 2014);
- Multiple sclerosis (Burke et al, 2011).

The nurse-led clinic was established by developing a competency pack, which...
detailed the requisite knowledge and skills for nurses to safely and independently perform GONIs. To be signed off as competent, nurses were required to observe and then demonstrate correct GONI technique, under consultant supervision.

**Patient satisfaction survey**

Between November 2013 and September 2014, 314 patients attending nurse-led GONI clinics were invited to complete a 14-item patient satisfaction questionnaire, with space for free text. A total of 104 patients were recruited during this period.

Patients who had been referred to the clinic had:

- Moderate to severe symptoms that had a significant impact on quality of life;
- Failed two standard prophylactic treatments for headache;
- Tenderness over one or over both areas of the head supplied by the greater occipital nerve – this had previously been found to be predictive of positive therapeutic response (Afridi et al, 2006).

All injections were performed by nurses. A mixture of 4ml 0.5% bupivacaine and 4ml 2% lignocaine was injected occipitally, 1-2cm below the midpoint between the occipital tubercle and mastoid process (see Fig 1). There are three band 6 nurses who can independently perform GONI.

**Results**

**Quantitative data**

The majority of quantitative patient feedback was highly positive (Table 1); these findings were congruent with qualitative data. Unanimously positive feedback related to patients’ perceptions of nurse ability (99%), compassion and professionalism (100%) and information relating to aftercare (100%). Patient perception of nurses’ communication skills was also highly positive (88%). Those who had previously attended a consultant-led GONI clinic reported that they found the nurse-led clinic more efficient (89%), and that the wait to be seen was shorter (95%).

In the consultant-led clinic, nurses had only a clerical role and GONIs were performed by one consultant; this enabled between seven and 10 patients to receive a GONI per session. The nurse-led clinic typically allows two or three additional patients to be treated.

Feedback related to appointment choice was mixed. Although only 39% of patients were offered a choice of clinic dates, the majority accepted a lack of appointment choice – this was unlikely to contribute to patient dissatisfaction, as discussed below.

**Qualitative data**

Analysis of the qualitative data identified four themes:

- **Professionalism**;
- **Communication**;
- **Comparison of nurse-led and consultant-led clinic**;
- **Appointment choice**.

**Professionalism**

Comments related to this domain largely comprised non-specific positive feedback such as “very good” or “excellent”. More specific feedback included:

> “The nurse was extremely compassionate and very comforting, especially when I was crying.” (Patient 2)

> “Very friendly and helpful.” (Patient 47)

> “[Nurse] is brilliant at her job, both in her own work and organising the others around her.” (Patient 11)

**Communication**

First-time attendees reported receiving a good explanation of the procedure. Comments included: “very reassuring” and “excellently explained”. Patients were also satisfied with the way nurses obtained their consent and explained aftercare.

**Comparisons of nurse-led and consultant-led clinics**

Patients who had previously attended consultant-led GONI clinics reported that they felt the nurse-led clinic was more efficient, with a shorter wait to be seen:

> “Everything was good, especially the nurse who did the procedure. The whole system seems much better.” (Patient 71)

**Appointment choice**

Qualitative data reflected patient acceptance of the lack of appointment choice:

> “I don’t mind not having a choice of dates.” (Patient 54)

> “I’m sure I could have changed [the appointment] date if it was inconvenient.” (Patient 2)

> “I was happy with the first date I was given.” (Patient 33)

**Discussion**

Patient feedback on the nurse-led GONI clinic was positive, with the highest levels of satisfaction being reported for the nurses’ ability, professionalism and compassion. Importantly, returning patients perceived the clinic to run more efficiently and take less time compared with the traditional consultant-led model. While quantitative data showed the majority of patients were not offered a choice in clinic dates, qualitative data suggested this did not detract from patient satisfaction.

The inclusion of a follow-up period would have been useful to see whether attendees experienced long-term improved satisfaction compared with the consultant-led clinic. Monitoring of subsequent patient attendance would also enable us to comment on how nurse-led GONI affects treatment adherence.

The study could have been broadened to include independent observations of technique and the recording of patient-related outcomes. The study could have been broadened to include independent observations of technique and the recording of patient-related outcomes.
side-effects to compare clinical competence and patient outcomes of the nurse-led clinic with those of the consultant-led one.

**Conclusion**

The cost of treating long-term conditions continues to rise in the UK, and greater use of nurse-led clinics could help to address this issue without having a negative impact on patient satisfaction. As the largest sector of the healthcare workforce, nurses are ideally suited to collaborate with other professionals to meet the demands for long-term care. Arguably, the person-centred, holistic nature of nursing practice means nurses may often be in a better position than doctors to judge a patient’s capacity for understanding and adhering to a treatment regimen (Berra et al, 2006).

Within the broader literature, nurse-led clinics have typically focused on the management of a single long-term condition but, as our population ages, the number of people with multiple long-term conditions is likely to rise. The development of a nurse-led service that could more holistically assess and manage patients, therefore, would be advantageous. The level of supervision and training for nurses providing outpatient care is highly variable nationally so a national set of competency standards would be useful to ensure optimal outpatient care continues to be delivered by nurses. **nt**

**References**


**For more on this topic go online...**

- Empowering advanced practitioners to set up nurse led clinics for improved outpatient care
- Bit.ly/NTNurseLedClinics

**TABLE 1. QUESTIONNAIRE RESULTS**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>n/a (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you informed by your consultant that the clinic is nurse-led?</td>
<td>72</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>Did you feel you were given adequate information regarding your injection by your consultant prior to your admission?</td>
<td>97</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Were you given a choice of dates for your admission?</td>
<td>36</td>
<td>56</td>
<td>8</td>
</tr>
<tr>
<td>Were you greeted by a member of staff on arrival?</td>
<td>95</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Do you feel that being consented for a couple of injections will enable you to manage your condition more effectively?</td>
<td>81</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Did you feel the nurse-led clinic has shortened the duration of your admission?</td>
<td>77</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Did you expect to have a consultation with the consultant?</td>
<td>29</td>
<td>65</td>
<td>6</td>
</tr>
<tr>
<td>Did you feel confident in the nurse’s ability?</td>
<td>99</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Were your treated in a caring and professional manner?</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Do you feel that adequate aftercare was explained to you prior to discharge?</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>If this is your first visit, did you feel the procedure was fully explained to you by the nurse?</td>
<td>44</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>If this is not your first visit, has moving to a nurse-led clinic helped make your visit more efficient, for example, improved waiting times, explanation of procedure and quality of service?</td>
<td>56</td>
<td>8</td>
<td>36</td>
</tr>
</tbody>
</table>