This leaflet will give you more information about the GON injections we use for head pain. It contains information on what they are, why we perform them, and what to expect when you come into hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is it?
A GON injection involves the injection of a small dose of local anaesthetic (lidocaine) and steroid (methylprednisolone) around the greater occipital nerve, at the back of the head, at the top of the neck.

Why is it done?
For people with chronic or disabling headaches, injecting the GON, as part of a headache management plan, can provide temporary benefits in about two out of three (66%) cases. These benefits are typically short-lived and may last a few weeks, but sometimes people get much longer periods of relief. The headaches may ease in frequency or severity, or stop for a period of time. In about one in three (33%) cases, the injection does not provide any benefits at all.

Please note that there is usually no advantage in giving the injection to someone whose headaches are in remission. If your headaches have settled down between the time of booking the injection and the appointment itself, please discuss this with us.

Are there side effects?
As with any injection, there is a small risk of bleeding or bruising at the injection site, and a theoretical risk of infection, but this is very unlikely. Rarely, people describe the headache as getting worse, but this is usually quite short lived (24 to 48 hours). Some people can experience dizziness after the injection, which is why we advise you to stay in the clinic for half an hour after the injection, to make sure that you feel alright before you go home. Some patients prefer to bring someone, but this is optional. However, you may feel safer if you bring someone with you as, if you are very dizzy, you may not feel safe to drive home or use public transport.

It is important that you inform your nurse or doctor of your current medications so that they can review them for potential interactions. For example, if you take anti-retroviral medications please let your doctor or nurse know, as these can interact with the steroids used in these injections.

If you are on anti-coagulant drugs it is important that you inform your nurse or doctor so that they can liaise with you and your anti-coagulant clinic to ensure that necessary blood tests are carried out prior to the injection to ensure your blood level is safe before proceeding with the injection.
Very rarely, patients have experienced a small (about the size of a 1p coin), permanent area of hair loss at the site of injection. This is obviously more likely to be a cosmetic issue in those with short hair rather than long hair.

Current guidelines states that this procedure can be carried out during pregnancy and in men trying to father a child

If you have any questions or concerns about the injection, please feel free to discuss them with the doctor or clinical nurse specialist (CNS) before having the injection.

**What does it feel like?**
Before carrying out the injection, the doctor or CNS will feel around the area to locate the tender spot which is suitable for the injection. This process can be uncomfortable. They will also swab the skin with alcohol.

The injection itself uses a fine needle and, although the local anaesthetic can sting a little, the procedure is generally well-tolerated and only takes a couple of minutes. People often report hearing the fluid being injected, due to the site of the injection, but this is fine for most people. Some patients report numbness around the head, neck or shoulder area after the injection.

After the injection, we will ask you to apply a little pressure to the area to minimise bruising.

**How soon can I go home?**
Because some people can feel dizzy after the injection, we ask you to wait for half an hour after the procedure to make sure that you feel well, and to check with the nursing staff before leaving.

**What can I expect in the days afterwards?**
You might notice a lump and/or mild soreness at the injection site, but this usually settles over the first few days. Please keep the area of the injection dry for 24 hours after the procedure to avoid infection. Do not worry if your headaches feel worse for a few days as this sometimes happens. Take your regular pain killers and medications as normal and if you still have any concerns please contact our CNS, the Neurology Department or your GP.

**Will it help my headache?**
This is difficult to predict, but your doctor will have arranged it because they feel that the injection is worth trying, and most people do benefit from it. Please note that, in people who have had this procedure before, the benefit can vary from one injection to the next. Our experience is that the injection is most helpful when given at the point which is most tender, so establishing the “right spot” before the injection gives us the best chance of success.

**What happens next?**
When you are ready to go home, you will be given an Headache impact test (HIT-6) form and a patient diary to complete and return (to your consultant’s secretary) **one month after** the injection. This gives us feedback as to whether the injection has worked or not. Normally, if there has been no benefit from the injection in the first seven to ten days, then it is unlikely to occur after this

If you benefit from the injection, your nurse or doctor will review your headache diary and HIT-6 form before deciding to repeat the injection. **Failure to complete and return your headache diary and HIT-6 form can make it difficult to assess your response to the injection, and may result in your treatment being stopped.**
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

Phone: 020 7188 8748, Monday to Friday, 9am to 5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

Phone: 020 7188 8801 (PALS)  Email: pals@gstt.nhs.uk
Phone: 020 7188 3514 (complaints)  Email: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.

Phone: 020 7188 8815  Email: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

Phone: 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

Website: www.nhs.uk

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

Phone: 0800 731 0319  Email: members@gstt.nhs.uk  Website: www.guysandstthomas.nhs.uk/membership
Phone: 020 7188 3514 (complaints)  Email: complaints2@gstt.nhs.uk

Contact us
If you have any questions, please contact us, phone: 020 7188 7188, extension 50836, or the Headache clinical nurse specialist, phone: 07827 897 256.

Headache Service, Neurology Department, 3rd Floor Lambeth Wing, St Thomas’ Hospital, London SE1 7EH, email: gst-tr.neurologyadmin@nhs.net  Website: www.gstt.nhs.uk

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

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