Harm Reduction Advice for Self Sourcing Hormones

We understand that some people are self-sourcing gender affirming hormones whilst awaiting assessment at a Gender Identity Clinic. If you are considering this, please make sure you follow the advice given in official guidance and not the advice you find on online forums. The official guidance is based on research evidence from across the world and can be found here: NSD_GRP_OG_05-Endocrine-and-fertility-preservation-guidance-2022-v0.8.pdf (nhs.scot).

We do not recommend self-sourcing hormones for several reasons:

- When sourcing without a doctor's prescription, such as from online sellers, there is no guarantee that the products are genuine. The drugs may be under-dosed, over-dosed or completely fake.
- They could be of a poor quality or something else entirely and therefore, potentially harmful.
- Without the relevant health checks prior to starting hormonal treatment, you could be putting yourself at risk, particularly if you have any underlying health conditions.
- Regular blood tests and blood-pressure monitoring are recommended when receiving gender affirming hormones and may not be available to those who are self sourcing. The recommended blood tests vary depending on the hormones being taken, but may include tests to check hormone levels, liver function and other blood counts(see below).You may end up using a dose that is not suitable for you.
- It is not possible to accurately know whether hormone levels are safe without regular testing. Abnormalities can be seen on blood tests before symptoms develop and this can provide a 'warning sign' that allows for changes to be made before significant complications occur.
- Those taking gender-affirming hormones experience life-changing physical changes, many of which are permanent, therefore, it is best if these are prescribed alongside specialist support.

Estradiol

Estradiol increases your risk of blood clots in the veins, which is called 'deep vein thrombosis'. These clots can travel to the lungs, which is called 'pulmonary embolus', and can be life threatening. The risk of deep vein thrombosis is higher in people using estradiol tablets (especially at higher doses) compared to patches or gel. Estradiol tablets should be swallowed as per manufacturer guidance and not taken sublingually. You should only use estradiol as directed and at the recommended doses and stop your treatment and seek medical assistance if you develop chest pain, breathlessness, or pain/swelling in your legs. Although there is limited research in this area, estradiol treatment may make you more likely to have high blood

pressure, stroke or heart disease. Estradiol can also make liver disease worse and liver blood tests should also be monitored when estradiol is prescribed.

Testosterone

One of the main risks of using testosterone is an increase in how thick your blood is, which is shown by a raised 'haematocrit level' on a blood test. The risk is greater if testosterone is taken at higher than recommended doses. Raised haematocrit levels can cause blood clots which can result in deep vein thrombosis, pulmonary embolus, heart attacks and stroke. You should stop your treatment and seek medical assistance if you develop headaches, dizziness, blurred vision, confusion, breathlessness, chest pain or pain and swelling in your leg. Other potential risks include conditions such as 'benign intracranial hypertension', heart disease, balding or hair loss, loss of fertility, raised cholesterol, and diabetes.

Testosterone does not stop you from getting pregnant and testosterone can cause abnormalities in a developing baby. Therefore, you should use effective contraception alongside your testosterone if this is relevant for you.

Injectable Hormones

Some people who are self sourcing hormones have chosen to use injectable forms which come with additional risks. Some of those risks are:

- Blood-borne viruses such as HIV and hepatitis-C if injecting equipment is shared.
- Bacterial infections if non-sterile equipment is used, equipment is used more than once, equipment is shared or correct hygiene techniques are not applied.
- Injecting wounds such as abscesses, and ulceration from poor injecting techniques or bacterial infections.

In people who are using injectable hormones, blood levels of estradiol, prolactin and testosterone are often significantly higher than recommended. When levels are higher than the recommended levels, this may further increase risks without any beneficial effect on the transitioning process.

Injecting Equipment

For those who are using injectable gender affirming hormones, they should follow safer injecting guidance.

Some basic safer injecting advice to be followed:

- Injecting equipment is sterile and single use only.
- Do not use any injecting equipment that is already opened or you have previously used.
- Never share equipment or use equipment previously used by others.

- Always wash your hands and clean the injection site prior to injecting.
- Clean the lid of your drug if not a single use ampoule.
- Ensure you inject in clean surroundings.
- Never allow someone who is not medically trained to inject you.
- Always follow safer injecting technique guidance.
- Always dispose of your used equipment using a sharps container.

Single use only sterile injecting equipment can be obtained for free at local Injecting Equipment Provision (IEP) sites,all the Lothian sites can be found here: All-IEP-Services-in-Lothian.pdf (nhslothian.scot). Specialist IEP services can provide expert safer injecting guidance and pharmacy IEP sites will provide basic safer injecting advice. Examples of the injecting equipment offered IEP sites in Scotland are included in this document. Self sourced GAH will be injected subcutaneously (into a specific layer of the skin shown in image 1) or intramuscularly (into the deep muscle) and never intravenously (into the vein).

Subcutaneous Injecting

This involves injecting into the subcutaneous layer of the skin (image 1) and will require a 29G all in one syringe (image 2), also commonly referred to at IEP sites as an “insulin syringe”. We recommend watching some videos about the safer subcutaneous injecting process such as https://youtu.be/SjrIit0fYgo. Once the solution is drawn up into the syringe, any excess air should be expelled. The most common site of injection is the abdomen; however, the upper outer thigh and arm can also be used. A large chunk of the skin should be pinched, and the syringe, with the bevel (hole) of the needle facing outwards, should be injected at a 45 degree angle if using those offered at IEP sites. Some subcutaneous needles require you to inject at a 90 degree angle. The drug should be injected slowly into the skin then the needle should be slowly removed, and then placed immediately into a sharps disposal bin, which can also be obtained at IEP sites. You may use a small plaster if there is any bleeding. You should also make sure to rotate the injecting sites.

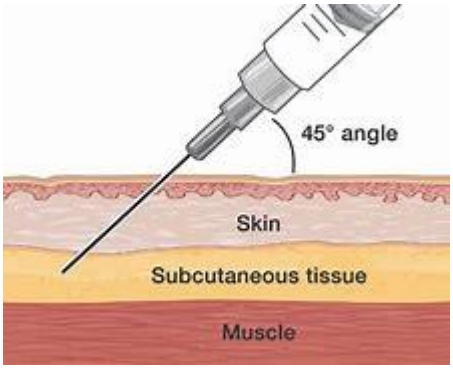

Image 1

29G Syringe

Image 2

Intramuscular Injecting

This involves injecting into the deep muscle, either into the upper outer thigh or the upper outer buttock. Each injection will require:

- a 1ml or 2ml syringe with no needle.
- a green 21G needle for drawing up the solution (image 3).
- a blue 23G long (image 4) or short (image 5) needle head for injecting the solution, depending on injecting site (long for upper outer buttock or short for upper outer thigh).

21G Green

Image 3

23G Long Blue

Image 4

23G Short Blue

Image 5

We recommend a person injects into the upper outer thigh into a muscle called the vastus lateralis (image 6), as it is very hard to inject into your own buttock, and a non-professional person should not be giving you injections. When injecting into the vastus lateralis, no more than 2ml should be injected at once, and you should alternate between the left and right thigh between every injection. We recommend watching videos such as https://youtu.be/lZg5XRNq2x8 .Those injecting into the buttocks should do so into the upper outer quadrant of the buttock (image 7). We recommend watching some videos prior to attempting to inject intramuscularly, such as https://youtu.be/AxKEJQg6lB8. It is important that you inject into the correct site at the buttock as there is a risk of hitting the sciatic nerve. You should alternate between the left and right buttock for each injection.

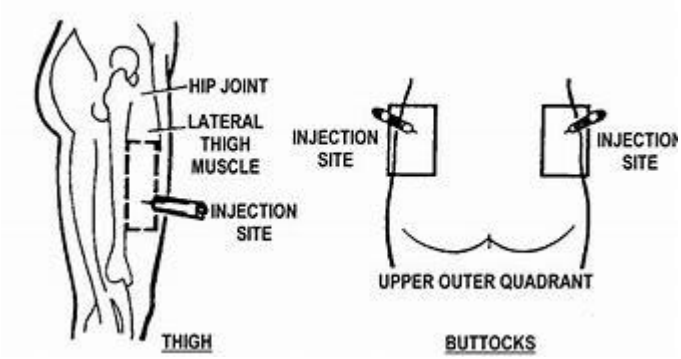

Image 6 Image 7

The sterile 21G green needle should be placed onto a single use syringe, and the drug solution should be drawn up with this needle. Once it is drawn up, the needle should be replaced with the correct 23G blue needle and any excess air in the syringe expelled. The tip of the needle should be pierced quickly into the injecting site as the skin is very sensitive to pain, and the rest of the needle should be pushed in slowly as to not shock the muscle. The drug should be injected very slowly into the muscle, and once fully injected the needle should be removed slowly and placed directly in to a sharps container. A sterile plaster should be used if there is bleeding at the site of injection.

When your sharps container is full, it should be sealed and returned to your local IEP site. The first few times you inject into the muscle you may experience some lasting pain at the site. After a few injections this pain should be lessened.