MEDICATION TO REDUCE MALE SEX DRIVE: GUIDANCE ON REFERRAL, ASSESSMENT AND PHARMACOLOGICAL TREATMENT

Who is this guidance for?

This guidance is to help agencies who work with men convicted of a sexual offence to decide who may benefit from referral for medication assessment.

Information on assessment, prescribing and follow up are aimed mainly at clinicians who receive referrals but may be of interest to those making the referral. A sample referral form is included in the appendices.

To help professionals prescribing these medicines, patient information leaflets, consent form and sexual behaviour review form are included in the appendices.

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INTRODUCTION

The primary treatment intervention for those who have committed sexual offences is psychological but international research and practice suggests that medication to reduce sex drive can help reduce problem sexual behaviour in some individuals.

Whilst the research base for this medication is limited (see Appendix 5) it may help reduce distress associated with sexual urges and possibly reduce the risk of acting on these urges. This is particularly the case where individuals experience high levels of sexual arousal, sexual rumination and/or difficult to control sexual urges, which can be difficult to address through psychological treatment alone. Medication may be useful in cases where individuals continue to have intrusive deviant sexual fantasies or strong sexual urges that have not been effectively modified by psychological treatment.

Medication may contribute to risk reduction but will not prevent re-offending on its own therefore is not intended to be the primary treatment. When it is used it should be in conjunction with other risk management strategies including programmes aimed at working with those who have committed sexual offences.

Medication is prescribed when the individual consents to treatment, free from duress and after being fully informed of the risks vs benefits. It is not to be prescribed as a condition for release from custody or a compulsory treatment in the community.

It is recognised that it may be difficult to exclude implicit pressure on a prisoner to accept medication, particularly as it may help them engage more fully in treatment programmes aimed at addressing their offending (and move on if they are unable to progress owing to concerns about further offending risk). These issues should be fully and transparently discussed with the individual to ensure properly informed consent.

This guidance covers treatment for males only.

This guidance is not intended to replace clinical judgement. It does not take away a prescriber's right to determine what is clinically most appropriate for their patient, nor their responsibility for that decision.

Information changes over time. Prescribers are advised to seek the most current information on medicines such as the latest Summary of Product Characteristics, or British National Formulary.

REFERRAL CRITERIA

Who should be referred?

1. *Men who have sexually offended and/or who pose a risk of sexual offending where there is a problem with*
    a. Sexual pre-occupation
    b. Hyper sexual arousal
    c. Deviant sexual fantasy which has not responded to psychological interventions and/or has been subjectively difficult to control

A score of 2 on any of the three sexual self-regulation items (sexual pre-occupation/sex drive, sex as coping, deviant sexual interests) of the Stable 2007 risk factors may give an indication of individuals who have problems in these areas, who may benefit from medication.

There should be evidence of ongoing difficulties in one or more of these areas, rather than only a history of such problems. However, if an individual has a history of these sexual difficulties and there are concerns these may re-emerge on release from a custodial or secure setting, then medication may be appropriate to prevent relapse on a case-by-case basis.

2. *The individual is willing to consider taking medication on a voluntary basis.*

Medication will only be prescribed on a voluntary basis with the full, informed consent of the individual.

Individuals who are uncertain or ambivalent should still be referred. Part of the assessment will include giving the individual risk and benefit information about medication options in addition to non-pharmacological strategies.

The issue of consent is particularly important if the individual also has a mental illness or in patients with mild learning disability who may not be able to fully consent to treatment – especially to be able to weigh up complex longer-term risks / side-effects of hormone treatments. The Mental Welfare Commission has produced a Good Practice Guide for mental health practitioners on consent to treatment, which can be found here: consent to treatment 2018.pdf (mwcscot.org.uk)

3. *It is the right time to consider starting medication.*

In most cases, medication should be considered when plans are being made to manage individuals in the community. Time to assess the individual and their response to medication will be required. For individuals in prison this could be 6-9 months prior to release. However, this timescale is for guidance only and some will require longer.

Even if an individual is not close to release, an assessment may help determine if medication is an option and when it should commence. This may for example be relevant for individuals serving indeterminate sentences.

Where individuals are displaying concerning sexual behaviour in prison and they appear to meet the criteria then medication may be considered even though release to the community is not yet imminent or under consideration.

For individuals in the community referral can be made at any time. If an individual is undergoing group work then medication may be considered as an adjunct or when psychological treatment alone does not appear to have been effective.

Where it is difficult for individuals to engage in psychological treatment due to sexual pre-occupation, high sexual arousal or deviant fantasies, medication may help them be able to engage in psychological treatment, either in the community or in prison.

Referrals should be made to an appropriately qualified and experienced psychiatrist.

Access to an assessment for suitability of medication depends on the availability of specialists in the individual health boards. This work is generally not formally funded, and is an "add-on" to the psychiatrist's other responsibilities. The availability of the service will depend on what can reasonably be offered in each area.

The Forensic Network keeps a list of forensic psychiatrists with an interest in treating sexual offending and can advise who to contact if emailed: tsh.forensicnetwork@nhs.scot.

If there is no psychiatrist listed for a Health Board it is suggested that enquiries should be made as follows:

- if the offender is in prison contact the prison mental health team or visiting psychiatrist
- If the offender is in the community contact the local forensic mental health service

Appendix 1 has a sample referral form.

Interventions for those who have committed sexual offences.

Most individuals being prescribed medication will also be receiving therapeutic input in relation to sexual offending for example attendance at Moving Forward 2 Change or the Self Change Programme.

ASSESSMENT

Initial assessment for medication

The assessment will involve interviewing the individual, reviewing records and reports, and discussing with others involved in managing the case.

The initial interview will usually take 1-1½ hours.

The aim of the assessment is to:

- Establish whether the individual has a sexual problem which makes medication appropriate, and if so to determine which medication to use
- Determine the understanding the individual has of the role of the sexual problem in their offending behaviour and risk of future offending
- Agree on whether it is an appropriate time to initiate the chosen medication
- Confirm the individual is agreeable to take medication voluntarily and can give fully informed consent
- Identify medical and/or psychiatric issues which may affect the prescribing decision
- Obtain a baseline assessment of sexual functioning against which to ascertain future functioning and response to medication
- Obtain a baseline assessment of physical health parameters against which to monitor individuals who are prescribed medication

Prior to prescribing a full medical history, physical examination and baseline blood tests should be obtained.

The medical history should include risk factors for cardiovascular disease, metabolic disorder and fragility fractures.

The physical examination should include weight, BMI, pulse and blood pressure as well as checking for evidence of gynaecomastia.

Recommended baseline blood tests:

- Testosterone level
- Liver function tests
- Renal function tests
- Full blood count
- Glucose
- Thyroid function tests
- Lipid profile

For individuals who accept medication, see page 11 for ongoing follow up and physical health monitoring recommendations.

MEDICATION OPTIONS

Note: refer to the current version of the British National Formulary which can be found here: BNF (British National Formulary) | NICE for the most up to date guidance on licensed indications, cautions/contraindications, side effects etc of all medication options outlined below.

Selective serotonin reuptake inhibitors (SSRIs)

These medicines are licensed and commonly prescribed for major depression, anxiety, obsessive compulsive disorder and other disorders. They act by increasing the concentration of serotonin, a neurotransmitter (or chemical messenger) found in the brain that is related to mood, impulsivity, appetitive behaviours such as eating and sleeping and sexual activity, amongst other things. Serotonin systems are known to interact with testosterone in the brain in the regulation of sexual behaviour.

SSRIs are not licensed to treat sexual disorders but have been found to help with sexual preoccupation without hypersexual arousal as well as sexual fantasies, arousal or behaviour which has an obsessive-compulsive element or is associated with low mood or anxiety.

SSRIs appear to be most effective where there is:

- sexual preoccupation (intrusive sexual thoughts or fantasies)
- a compulsive aspect to offending
- offending associated with depressed or anxious mood state
- or impulsive offending

Although sex drive may be decreased by SSRIs, this is not a predictable effect. Instead, the aim is to reduce the *intensity* of sexual fantasies and sexual urges, enabling the individual to control these better, for example by using skills learned in psychological treatment.

The only SSRIs that have been reported on in the literature are fluoxetine and sertraline. Although other SSRIs may have similar effects, prescription for sexual problems linked to sexual offending should, for now, be limited to these agents.

Antilibidinals (antiandrogen and gonadorelin analogue medication)

Cyproterone

Testosterone is the main sex hormone in men and is linked to level of sexual drive and desire to engage in sexual activity (libido). Antiandrogen and gonadorelin analogue medications reversibly reduce the level of testosterone therefore reducing the level of sexual interest. However, the ability to achieve an erection and sexual arousal are not wholly testosterone dependent. This means that even when testosterone levels have been reduced a man can still be sexually aroused but become less interested in sex with a reduction in spontaneous sexual behaviour.

The most commonly used antiandrogen is cyproterone acetate (Androcur), which is taken orally as a tablet. Cyproterone is licensed for control of libido in severe hypersexuality and/or sexual deviation in adult men. It primarily blocks testosterone receptors, but also reduces gonadotropin-releasing

hormone (GnRH) secretion by the hypothalamus and luteinizing hormone (LH) secretion by the pituitary.

Response is not instantaneous. It may take a number of weeks or months to achieve full effect.

Treatment is ineffective in treating hypersexuality in men with chronic alcoholism.

Common side effects include fatigue, depressed mood, feeling breathless, hot flushes and sweating. Other potential side effects include the risk of liver damage, breast growth and a decrease in bone density.

Direct hepatic toxicity, including jaundice, hepatitis and hepatic failure have been reported with cyproterone. Most reported fatal cases were in men with advanced prostate cancer. Toxicity is dose related and usually develops several months after initiating treatment. Liver function testing is essential (see follow up and physical health recommendations, page 10). If hepatotoxicity is confirmed, cyproterone should normally be withdrawn unless the hepatotoxicity can be explained by another cause such as metastatic disease (in which case cyproterone should be continued only if the perceived benefit exceeds the risk).

Recent studies have shown an increased risk of meningioma in association with the use of cyproterone, primarily at doses of 25mg/day or above. The risk increases with increasing cumulative doses. This side effect is rare: it may affect between 1 and 10 in 10,000 people depending on dose and duration of treatment. However in 2020 the European Medicines Agency recommended that cyproterone should only be used in sexually deviant men for reduction of sex drive when other options are not suitable.

In view of this new evidence and other concerns regarding cyproterone (e.g. potential non-compliance and reduced tolerability compared to gonadorelin analogues - also known as Gonadotrophin-releasing hormone agonists), GnRH agonists are now recommended first line particularly in more serious cases of hypersexuality and paraphilic disorders. The summary of product characteristics (SPC) for cyproterone has been updated to reflect this.

Gonadorelin analogues (GnRH agonists)

Triptorelin (Salvacyl) injection is licensed for the treatment of male hyper-sexuality with severe sexual deviation, to be injected every 12 weeks. Triptorelin is a synthetic decapeptide analogue of the natural gonadotrophin-releasing hormone (GnRH).

GnRH is synthesised in the hypothalamus and regulates the biosynthesis and release of the gonadotrophins; luteinising hormone (LH) and follicle stimulating hormone (FSH) by the pituitary. Following administration of triptorelin, there is an initial increase in circulating levels of LH, FSH and testosterone. However, chronic and continuous administration decreases LH and FSH secretion subsequently reducing testosterone levels. Approximately 2-4 weeks after initiation of triptorelin, testosterone levels decrease into the range normally seen after surgical castration.

GnRH agonists appear to have a more potent effect on testosterone levels and greater effect on sexual activity and arousal than cyproterone. This may be due to effect on GnRH neurons that project to brain areas beyond the pituitary, particularly the amygdala.

Common side effects include dizziness, headaches, nausea, depressed mood, weight gain, joint pain and oedema. GnRH agonists may have more of an effect on bone density than cyproterone. Triptorelin is contraindicated in patients with severe osteoporosis. Refer to page 11 for further information on osteoporosis risk.

Which medication to use?

Protocols from North America and Europe tend to focus on the risk of harm presented by the individual rather than clinical presentation. Past harm cannot be ignored but the best guide to which medication may have the greatest clinical effect is likely to be the current level of sexual interest and sexual activity.

See flowchart overleaf.

FLOWCHART FOR PRESCRIBING MEDICATION TO REDUCE MALE SEX DRIVE (IN CONJUNCTION WITH PSYCHOLOGICAL TREATMENT)

Selective serotonin reuptake inhibitors (SSRIs)

Sexual preoccupation (intrusive sexual thoughts or fantasies) without hypersexual arousal
Sexual fantasies, arousal or behaviour with rumination / obsessive-compulsive element or associated low mood or anxiety
Where the choice of medication is unclear / worries about side effect burden of antilibidinals

Sertraline 50mg, increasing to 100mg then 150mg at 4 week intervals depending on response (consider starting at 25mg/day if concomitant panic disorder / PTSD / social anxiety)
Sertraline | Drugs | BNF | NICE

If no/ inadequate response try fluoxetine (as above)*

Fluoxetine 20mg, increasing to 40mg then 60mg at 4 week intervals depending on response
Fluoxetine | Drugs | BNF | NICE

If no/ inadequate response try sertraline (as above)*

Consider antilibidinal treatment following further assessment and discussion of risk

*if strong co-morbid anxiety/depressive/OCD associated with the fantasies

Antilibidinals (GnRH agonist, cyproterone)

Hypersexual arousal
Deviant fantasies or arousal associated with subjectively difficult to control behaviour

Evidence of hypersexuality and high risk of serious harm (1st line):

Fantasies/urges associated with particularly high risk behaviours - where sexual sadism, paedophilia or other paraphilias / paraphilia related disorders have driven extremely serious offending (e.g. homicide, attempted homicide, rape)

Variable motivation to take oral medication consistently

Triptorelin 11.25mg by intramuscular injection every 12 weeks
Triptorelin | Drugs | BNF | NICE

Maintenance of sexual functioning is highly desirable

Individual content regarding advice on potential risks e.g. of meningioma, liver dysfunction

Cyproterone acetate 50mg twice daily, increased to 150mg/day after 8 weeks if little or partial effect, and then to 200mg/day after a further 8 weeks
Cyproterone acetate | Drugs | BNF | NICE

FOLLOW UP ARRANGEMENTS AND PHYSICAL HEALTH MONITORING

Follow-up should be at least monthly until the person is established on medication at the right dose for them. Frequency of follow-up when on a maintenance dose should be 2 - 3 monthly, with more frequent reviews if the dose needs to be re-adjusted. There should be nursing input to administer injections and monitor side effects.

At review appointments it will be necessary to:

- Assess change in frequency and intensity of problem sexual behaviour which can be monitored using the Sexual Behaviour Review Form (Appendix 3)
- Decide whether medication, dose or preparation needs to be changed
- Check for side effects from the medication and monitor physical health (see below)

Medical Examinations and Investigations

	Initial Visit	4 Months	8 Months	12 Months	Annually
Structured History about Metabolic Disorder	GnRH/CA			GnRH/CA	GnRH/CA
Assess for risk factors for fragility fractures	GnRH			GnRH	GnRH*
Weight	GnRH/CA			GnRH/CA	GnRH/CA
BMI / Waist Circumference	GnRH/CA			GnRH/CA	GnRH/CA
Cardiovascular disease risk, pulse & blood Pressure	GnRH/CA			GnRH/CA	GnRH/CA
Evidence of Gynaecomastia	GnRH/CA			GnRH/CA	GnRH/CA
Testosterone level	GnRH/CA	GnRH/CA	ICI	GnRH/CA	GnRH/CA
Liver Function Tests	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA
Full Blood Count	GnRH/CA			GnRH/CA	GnRH/CA
Urea and electrolytes (renal function)	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA
Glucose (fasting if possible)	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA
Thyroid Function Tests	GnRH/CA			GnRH/CA	GnRH/CA
Lipids (not fasting)	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA	GnRH/CA
Cortisol	ICI				
ECG	ICI				
DXA scan	ICI (see above)				

GnRH - GnRH Agonists CA - Cyproterone Acetate ICI - if clinically indicated

* For individuals prescribed triptorelin an annual risk of fracture check (QFracture or FRAX – links to tools on page 12) is recommended to determine whether preventative bisphosphonate medication would be warranted.

After one year, investigations are carried out annually unless otherwise indicated.

MEDICATION AND RISK OF OSTEOPOROSIS

GnRH agonists commonly reduce bone mineral density increasing the risk of fracture. This has been studied in men on GnRH agonists for prostate cancer. Prescribing GnRH agonists to reduce sex drive is a specialised area and not specifically considered in national guidance regarding assessment and management of osteoporosis. As a consequence, clinicians may find it helpful to develop links with their local specialist service for advice following abnormal or equivocal Dual-Energy X-Ray Absorptiometry (DXA) scans.

Advice has been obtained from the Chair of the Scottish Intercollegiate Guideline Network - Management of Osteoporosis and Prevention of Fragility Fractures (SIGN 142). This may help support clinicians in discussion with local specialist services:

- Routine DXA scan is not necessary in most patients.

- However some patients may be at higher risk therefore calculating fracture risk is recommended for all patients, using one of the following tools:
  https://qfracture.org/index.php
  https://www.sheffield.ac.uk/FRAX/tool.aspx

- **Patients where DXA may be appropriate are**
  - Aged > 50 years **and** QFracture or FRAX >10%.
  - Aged < 50 years **and** another clinical risk factor (see table overleaf) **and** QFracture or FRAX > 10%

This guidance is based on expert advice and not supported by research evidence base. Clinicians may wish to have a lower threshold in the use of DXA scan and should use their clinical judgement in individual cases.

Lifestyle advice including smoking cessation, moderation of alcohol consumption and regular weight bearing exercise are recommended to reduce treatment-related bone loss. Ensuring adequate dietary calcium and vitamin D intake are also advised, and vitamin D supplementation as per Scottish Government recommendation for all adults (ref: Vitamin D: advice for all age groups - gov.scot (www.gov.scot).

Where a patient is found to have osteopenia or osteoporosis the benefit of continuing triptorelin will have to be weighed against the physical health risks. Local specialist advice (rheumatology or endocrinology) should be sought on future monitoring and possible bisphosphonate treatment to prevent further bone loss.

It has been highlighted that some prostate cancer patients on GnRH agonists are commenced on bisphosphonate medication to prevent osteoporosis. On discussion with West of Scotland uro-oncology colleagues this appears to be for metastatic patients who are more prone to skeletal-related events. For non-metastatic patients the FRAX tool is used to assess risk.

For individuals prescribed triptorelin an annual risk of fracture check (QFracture or FRAX) is recommended to determine whether preventative bisphosphonate medication would be warranted.

Osteoporosis is also a recognised side effect of long term SSRI or cyproterone use. Where the patient wishes to continue this medication in the presence of proven osteopenia or osteoporosis, local specialist advice should be sought on future monitoring and possible bisphosphonate treatment to prevent further bone loss.

Risk factors associated with fragility fracture which should prompt consideration of fracture risk assessment (adapted from SIGN 142)

Risk category	**Causative factor**
Non modifiable	Previous fracture Parental history of osteoporosis
Modifiable	Low BMI (<20 kg/m2) Smoking Alcohol intake
Coexisting disease	Diabetes Inflammatory rheumatic diseases (RA or SLE) Inflammatory bowel disease and malabsorption Institutionalised patients with epilepsy Human immunodeficiency virus (HIV) Primary hyperparathyroidism and endocrine diseases Chronic liver disease Neurological diseases (including Alzheimer's disease, Parkinson's Disease, Multiple Sclerosis, stroke) Moderate to severe chronic kidney disease Asthma
Drug therapy	Long-term antidepressants Antiepileptics Aromatase inhibitors Proton pump inhibitors (PPIs) Oral glucocorticoids Thiazolidinediones

APPENDIX 1

REFERRAL FORM FOR ASSESSMENT OF SUITABILITY FOR MEDICATION TO REDUCE MALE SEX DRIVE

This form does not have to be used but referrals should contain the relevant information below.

Individual's details	
Name	
Date of Birth	
Current location / address	
GP	
Professionals and services currently involved in case with contact details	
MAPPA level (if applicable)	
Offending history	
Current conviction and date	
Current sentence and expiry / release date	
Brief description of current offence	
Previous convictions (sexual and non-sexual) and sentences. Please give brief descriptions of previous sexual offences.	
Psychological and medical treatment	
Treatment received so far (e.g. group work for sexual offending)	
Previous or current mental health treatment	
Known medical conditions	
Current medication	

Does the person meet criteria for referral?	
Brief description of why medication may be appropriate	
Is the individual agreeable to consider medication? Has he read the general Medicines to Lower Sex Drive information leaflet and agreed to an appointment with a doctor?	

Does the individual appear to have one of the following sexual problems? • Sexual pre-occupation • Hypersexual arousal • Deviant sexual fantasy which has not responded to psychological interventions and/or has been subjectively difficult to control • Sex as way of coping with low mood or anxiety	
Is it an appropriate time to consider medication? • In community / due for release from prison in next 6-9 months /being considered for progression from closed conditions in prison? • Appears to need medication to facilitate involvement in psychological treatment • Current concerning sexual behaviour	

Documents attached (Please tick)	
Social enquiry report	
Other pre-sentence reports	
SCP/ MF2C treatment reports	
Risk assessment (e.g. Stable and Acute / RM2000 / RA4 / SARN)	
Other psychology reports	
Pre-release reports (e.g. reports for parole board)	
Psychiatric reports	
Other (e.g. other documents with details of background history, offending history, psychiatric or medical history, or response to treatment and management attempts)	
Referred by	
Name	
Designation	
Organisation	
Date	
Signature	

APPENDIX 2

MEDICINES TO LOWER SEX DRIVE

INFORMATION LEAFLET FOR PATIENTS

Psychological therapy is when you get help to talk through your problems.

Psychological therapy is the main treatment for people who have committed sexual offences.

You can get Psychological therapy as part of your treatment programme.

For some men, medicine can help too.

You can talk to your Supervising officer or treatment programme manager.

This leaflet tells you a bit about the types of medicines that are used.

One type of medicine to lower sex drive is **Selective Serotonin Reuptake Inhibitors** (S-S-R-I-s)

SSRIs most used are **Fluoxetine** and **Sertraline**

SSRIs are usually used to treat depression and anxiety

SSRIs can also treat:

Obsessive thinking - being unable to stop thinking about things

Compulsions - feeling you have to do things you might not want to do

Impulsivity - doing things without really thinking them through

For some people these things are linked to the risk of them carrying out a sexual offence.

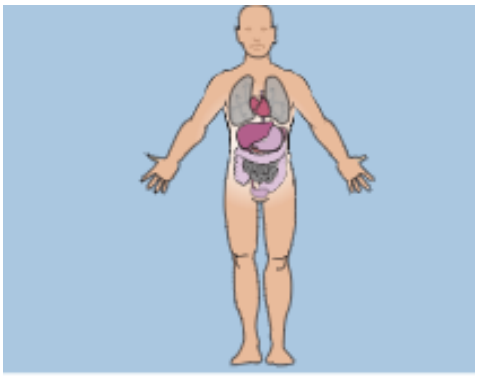
SSRIs lower your sex drive.

SSRIs can help lower the strength of your sexual fantasies. This can help you control your sexual fantasies and sexual urges better.

SSRIs can help if your sexual fantasies make you feel depressed.

Taking an SSRI might help you use the skills you learn in your Psychological therapy.

Men who take SSRIs can still have normal sex.



SSRIs can cause side effects.

Side effects are things that happen in your body that you might not want.

The side effects are usually mild. They often go away once you have been on the medicine a while.

Another type of medicine is medicine to lower Testosterone.

Testosterone is the sex hormone in men

The medicine of this type that is most used is called **Triptorelin.**

Triptorelin is given every 3 months by an injection

Cyproterone Acetate is another medicine to lower testosterone.

Cyproterone has more side effects and risks.

Cyproterone should only be used if Triptorelin is not suitable.

Medicines to lower testosterone are stronger than SSRIs.

These medicines might help if SSRIs have not worked

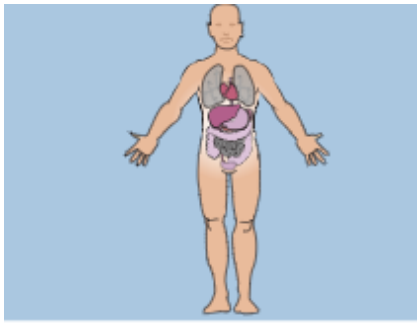
Triptorelin might help if you have difficulty remembering to take tablets.

Medicines to lower testosterone help you

- think about sex less often
- have less sexual frustration
- have less erections
- have less need to masturbate

A high sex drive might affect how you cope day to day.

Medicine could help you cope better.



There are side effects with medicines like Triptorelin and Cyproterone Acetate.

Your doctor would talk to you about these side effects before starting and during treatment.

To find out more about medicine to lower your sex drive, you need to speak to a doctor.

The doctor will talk to you about what medicine might be right for you.

If you decide not to take medicine your sex drive, sexual fantasies and sexual urges are likely to stay the same.

Taking medicine does not mean that you will definitely stay away from offending.

Medicine is just one part of the overall plan to lower your risk of offending.

INFORMATION LEAFLET FOR SSRIs

Fluoxetine or Sertraline (both SSRIs)

SSRIs (Selective Serotonin Reuptake Inhibitors) are antidepressants. In adults they are usually used to treat depression, but they can also treat anxiety, being unable to stop thinking about things (obsessive thinking), feelings of having to do things you might not want to (compulsions), and doing things without really thinking them through (impulsivity). These drugs can be helpful when factors such as these are linked to offending. SSRIs can also reduce people's sex drive.

Benefits

SSRIs might be helpful if you have frequent sexual fantasies (particularly when you find it hard to distract yourself from these fantasies), if your sexual urges are hard to control, or if you have thoughts of offending when you feel depressed. In these situations, SSRIs should reduce the *intensity* of sexual fantasies and sexual urges. Then you can control your fantasies better, for example by using the skills you have learned in your treatment programme. Men who take SSRIs are still capable of having sex as normal.

Possible side effects

SSRIs can cause a number of side effects, but these are usually mild, and often go away after the early stages of treatment. The following ones have been reported to occur in 1 in 10 people or more:

- feeling tired
- feeling or being sick
- diarrhoea
- headache
- problems sleeping

Your doctor will be able to discuss possible side effects with you in more detail.

Alternative treatments

Other medications can reduce sex drive by reducing testosterone (the sex hormone in men). These may be more suitable for men who have a very high sex drive (hypersexuality), or where sexual fantasies or urges have led to sex offending.

What may happen if I don't have the treatment?

Your sex drive and sexual fantasies/urges are likely to stay the same.

Whenever medication is used, it is important to remember that the drug on its own will not ensure that reoffending will not take place. Your medication is just one part of your overall relapse prevention plan.

INFORMATION LEAFLET FOR TRIPTORELIN

Triptorelin is a hormone treatment that reduces the levels of the male hormone testosterone. This has the effect of reducing the sex drive, and makes it much more difficult to have an erection and masturbate, or have sex. It is the most commonly used medication in the UK and is given by injection every 12 weeks. It is stronger than SSRI medication like fluoxetine.

Benefits

Triptorelin may help men who have such a high sex drive that they can't focus very well in their treatment programme, or where sexual fantasies or urges have led to sexual offending, or if their sex drive affects their normal day to day functioning. It may also be helpful if SSRI medication has not worked, or if the person has difficulty taking tablets regularly.

Side effects

You are unlikely to experience all of the side effects mentioned. The more commonly experienced side effects are:

- Injection site reactions (redness, swelling)
- Hot flushes
- Weight gain
- Mood changes
- Lower energy levels
- Joint or muscle pain

Long term treatment with Triptorelin may cause loss of bone density and may lead to osteoporosis – which increases the risk of bone fracture. Patients have a bone scan 2 years after starting Triptorelin and may be advised to take medication that increases the bone density.

Swelling of breast tissue (gynaecomastia) is uncommon and usually regresses if Triptorelin is stopped.

Your doctor will be able to discuss possible side effects with you in more detail.

Alternative Treatments

There is another hormone treatment called Cyproterone Acetate which also reduces the testosterone level and is taken as a tablet twice a day. The side effects are similar to Triptorelin but are usually more troublesome. There is also an increase in the risk of getting a rare benign brain tumour, called meningioma. This treatment should therefore only be used if Triptorelin is not appropriate.

What may happen if I don't have the treatment?

Your sex drive and sexual fantasies/urges are likely to stay the same.

Whenever medication is used, it is important to remember that the drug on its own will not ensure that reoffending will not take place. Your medication is just one part of your overall relapse prevention plan.

INFORMATION LEAFLET FOR CYPROTERONE ACETATE

Cyproterone acetate is a hormone treatment that reduces the levels of the male hormone testosterone. This has the effect of reducing the sex drive, and makes it much more difficult to have an erection and masturbate, or have sex. It is taken as a tablet twice a day. It is stronger than SSRI medication like fluoxetine.

Benefits

Cyproterone acetate may help men who have such a high sex drive that they can't focus very well in their treatment programme, or where sexual fantasies or urges have led to sexual offending, or if their sex drive affects their normal day to day functioning. The dose can be adjusted to allow a patient to continue functioning sexually – for example, to have an erection and have sex. **Cyproterone acetate should only be used when Triptorelin injections are not suitable - see below under the heading Alternative Treatments.**

Side effects

You are unlikely to experience all of the side effects mentioned. The more commonly experienced side effects are:

- Hot flushes
- Weight gain
- Low mood
- Lower energy levels
- Joint or muscle pain
- Swelling of breast tissue (gynaecomastia) – usually reversible if Cyproterone is stopped
- Liver toxicity – usually after several months of treatment. Blood tests will be done to check for this

There is also an increase in the risk of getting a rare benign brain tumour, called meningioma.

Your doctor will be able to discuss possible side effects with you in more detail.

Alternative Treatments

There is another hormone treatment called Triptorelin which is given as an injection. **Triptorelin should usually be given in preference to Cyproterone Acetate because it does not increase the risk of meningiomas.** Triptorelin is usually tolerated better by patients than Cyproterone acetate.

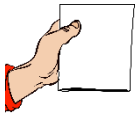
What may happen if I don't have the treatment?

Your sex drive and sexual fantasies/urges are likely to stay the same.

Whenever medication is used, it is important to remember that the drug on its own will not ensure that reoffending will not take place. Your medication is just one part of your overall relapse prevention plan.

APPENDIX 3

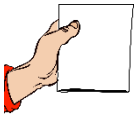
CONSENT FORM



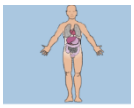
I have read the information leaflet called “Medicine to lower sex drive” ☐

I have discussed the information leaflet with _____ ☐

I have had a chance to ask questions about it ☐



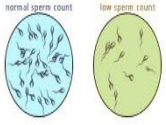
I have been given an information leaflet about the medicine that I will be on ☐



I have been told about the possible side effects of _____ ☐

I know that I will need to have regular blood tests ☐

I know I might need other tests to monitor side effects ☐



I know that these medicines can lower how much sperm my body produces. I know that my sperm will not be counted before starting treatment. ☐

I know that other appropriate people might need to be told about my sexual risk and how the medication is working for me.

I am ok with this. In most cases I will be told about any information that is going to be passed on. ☐

NAME _____

SIGNATURE _____

DATE _____

I have talked about all the information above with _____

NAME _____

SIGNATURE _____

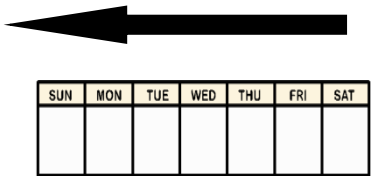
DATE _____

APPENDIX 4

SEXUAL BEHAVIOUR REVIEW FORM

Name of patient _____ Date of review _____

Medication _____ Dose _____



Think about the last week. How many days have you:

Masturbated and had an orgasm _____days

Masturbated and had no orgasm _____days

Had sexual activity with your partner and had an orgasm _____days

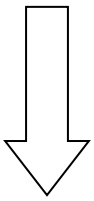
Had sexual activity with your partner and had no orgasm _____days

Had any type of sexual activity more than once in a day _____days

What is the most number of times you have had sexual activity in one day? _____times

In the last week:

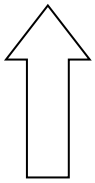
How strong have your sexual urges or fantasies been?



|_____|_____|_____|_____|_____|_____|_____|

0 1 2 3 4 5 6 7

(low)



(high)

How much time have you spent thinking about sex?

|_____|_____|_____|_____|_____|_____|_____|

0 1 2 3 4 5 6 7

(very little)

(a lot)

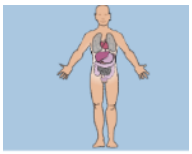
How have you found distracting yourself from sexual thoughts?

|_____|_____|_____|_____|_____|_____|_____|

0 1 2 3 4 5 6 7

(easy)

(hard)



What side effects have you had? _____

APPENDIX 5

EVIDENCE BASE

Evidence base

Below are listed references on the effectiveness of pharmacological treatments for sex offending. Although there is a lack of randomised controlled trials, the conclusions of international experts in the field, based on the evidence that is available, is that the use of SSRIs (Adi, Ashcroft, Browne, Beech, Fry-Smith & Hyde, 2002) and anti-androgen medication (Briken & Berner, 2003) is supportive and positive, although not necessarily robust, and that the use of such medications is justified and should be considered in the treatment of sexual offenders.

A meta-analysis (Lösel & Schmucker, 2005) concluded that the effect size for medication in reducing re-offending was greater than for Cognitive Behavioural Therapy, although it should be noted that medication was rarely used in isolation from psychological interventions. These medications are used in a number of countries, including Canada, USA, Germany, Netherlands, France, Australia and England, as an adjunct to psychosocial interventions.

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