

ICKY'S GUIDE TO MtF MEDICAL TRANSITION

Hi I'm Icky also known as Ashley n I believe that info about medically transitioning should b super easy to attain and not require 100 google tabs and a medical degree 2 understand. PLEASE read this doc if you're set on transitioning but have absolutely no idea what would actually happen, I've done the research 4 u <3

In no way is my transition perfect or my results particularly impressive, I just feel strongly about learning as much as u can about smthing as big as transitioning before starting! There is no **right** way to transition but there is a **safe** way <3

okok I'm going to talk all professional now to seem more respectable. Xoxo

A medical transition is not necessary to be your gender identity however, it is an important step for the majority of trans femmes/ non-binary individuals. This info focusses on the effects, safety and medication involved in a MtF (Male to Female) transition but may also benefit a lot of other trans femmes without a clear gender binary.

If you're unsure of how to transition, what to expect or have put off looking into it entirely **please** read this document before committing to any medication. Some effects of HRT (Hormone Replacement Therapy) are **permanent** and should be seriously considered before medication is taken.

This document is merely a guide and not a scientific paper or study, some information may be anecdotal but will be labelled as such.

Think of this as more of a quick and easily accessible resource to inform yourself or others.

DISCLAIMER: *Although a lot of care has gone into making sure this document is accurate and sourced, transgender medicine is still evolving and information may become out of date. Every transition is unique to the person experiencing it. Do not be disheartened if your experiences differ from the ones listed or the effects are appearing a lot slower than expected. This document is not set out to encourage or discourage anyone from their transition, it is simply neutral information about the process. Xoxoxo*

TYPES OF MEDICATION:

It's important to first understand the types of medication needed to medically transition. These can be broken down into 4 categories:

Estrogen/Oestrogen (These come in various forms such as pills, gels or patches and are responsible for the majority of the feminising effects).

Anti-Androgens (Also known as testosterone blockers. These work by reducing the amount of testosterone your body produces allowing feminisation to take place).

Progesterone (Progesterone is a natural female sex hormone. Research into the effects of progesterone on trans women/femmes is limited and is still debated on whether it has any benefits at all. There is a lot of anecdotal evidence to progesterone being helpful to a MtF transition).

Puberty Blockers (These postpone puberty to delay the development of sex characteristics that cannot be changed by HRT alone. If HRT is taken before puberty these unwanted effects can be avoided entirely).

It's important to know the options available for each of these categories, as each one is different and carries its own potential set of risks.

OESTROGEN

***Note: it is important to make sure you are taking bioidentical hormone medications as these carry far fewer risks than synthetic hormones. ***

Please do not use this table as a basis to self-medicate, it can be very dangerous.

Oestrogen, Estrogen or just E can be taken as:

Medication type:	Administration route:	Doses:
As a pill	Orally.	2-6mg doses per day
As a gel	Applied to the skin. Can be applied to either the outer arms, shoulders or inner thighs.	2-6 pre measured doses applied once or twice a day. Usually 12 hours apart.
As an injection	Injection by nurse or by yourself into a muscle, usually the thigh.	Usually weekly to avoid symptoms of a hormonal period. 4-7 mg (intra muscular) Different brand names have different concentrations of medication.
As a hormone patch	Stuck to a clean, dry patch of skin on the stomach or lower buttocks.	0.025-2mg every day, with patches being changed every 3-5 days.

It's important to note that medication amounts and when to take them varies between healthcare providers. It's important to check blood results regularly to get the best, safest results out of any of the above medication.

The main risks of Oestrogen by medication.

One of the most important risks to think about before considering HRT is that it will most likely make you infertile. Fertility has been known to return to those who stop taking meds but it is not guaranteed. It's important to consider the future and look to sperm storage options before beginning any medication.

Be sure to check you are receiving bio identical hormone medications, synthetic hormones increase the risks by a lot. When looking for progesterones it is ideal to have micronized progesterone as it is the most bio identical and the easiest to absorb orally. Estradiol E2, estriol E3, estrone E1 & progesterone are all bio identical female hormones.

PILLS: Oestrogen pills are perhaps one of the riskiest forms of E available, however they are usually the cheapest and easiest to administer. The main risk from taking oestrogen orally is the increased risk of blood clotting. This can manifest in a Deep Vein Thrombosis or Pulmonary Embolism which are both

medical emergencies. Researchers are unsure whether the correlation between oral oestrogen and blood clotting is as strong as it once was, however being overweight or smoking increase the risk dramatically.

It is important to note that oral oestrogen puts a lot of strain on the liver, and it is not recommended that individuals drink more than one 1-2 alcohol beverages in one sitting. Oral oestrogen can be taken sublingually (placed under the tongue until dissolved), this may avoid the effects associated with first passing through the liver via the digestive tract, although research into this is very minimal and mostly anecdotal.

Side effects and risks connected to oral administration of oestrogen are as follows:

Stomach upset.

Nausea/vomiting.

Bloating.

Breast tenderness.

Headache.

Weight changes.

Serious side effects that require immediate attention from your doctor are labelled as:

Depression.

Memory loss.

Sever stomach/abdominal pain.

Persistent nausea/vomiting.

Yellowing skin or eyes.

Dark urine.

Swelling hands/ankles/feet.

Increased thirst/urination.

Blood clots.

**** It is important to note that skin changes, breast pain/tenderness, weight gain, changes in mood and changes in sexuality are all common and potential changes with MtF HRT. The guidelines for these medications are usually written for cis, menopausal women who are more at risk. Headaches, nausea and tiredness are all common when first starting HRT and are more prevalent when hormone levels are imbalanced, or all around too low. ****

Warning symptoms of Deep Vein Thrombosis are:

Throbbing or cramping pain in 1 leg (rarely both legs).

Warm skin around the painful area.

Red or darkened skin around the painful area.

Swollen veins that are hard or sore when you touch them.

It is possible these symptoms can also occur in your arm or your stomach.

GELS: Gels are a safer form of oestrogen application; they avoid putting strain on the liver via transdermal application (being absorbed by the skin). Through this the medication avoids a “first pass” through the liver, although must be absorbed at some point. The downside of gels is that they are uncomfortable to apply, having to wait 5-10 minutes for the gel to dry before getting dressed as well as avoid bathing, showering or swimming for several hours or entirely after application. If applied to the breasts oestrogen gel can significantly raise the risk of breast cancer. It should also be noted that you must wash your hands after application and avoid allowing anyone to touch the areas you applied the gel for at least 2 hours as it can cause serious risks to their health.

Side effects and risks connected to transdermal administration of oestrogen are as follows:

Headaches.

Breast pain or tenderness.

Nausea.

Constipation.

Gas.

Heartburn.

Weight gain or loss.

Changes in mood.

Congestion.

Anxiety.

Depression.

Change in sexual desire.

Serious side effects that require immediate attention from your doctor are labelled as:

Bulging eyes.

Yellowing of the skin or eyes.

Loss of appetite.

Fever.

Joint pain.

Stomach tenderness, pain, or swelling.

Movements that are difficult to control.

Itching.

Hives.

Rash, blisters on skin, or other skin changes.

Swelling of the eyes, face, lips, tongue, throat, hands, feet, ankles or lower legs.

Hoarseness.

Difficulty breathing or swallowing.

**** It is important to note that skin changes, breast pain/tenderness, weight gain, changes in mood and changes in sexuality are all common and potential changes with MtF HRT. The guidelines for these medications are usually written for cis, menopausal women who are more at risk. Headaches, nausea***

and tiredness are all common when first starting HRT and are more prevalent when hormone levels are imbalanced, or all around too low. *

PATCHES: Hormone patches are useful in that they can deliver a consistent amount of oestrogen throughout the day when compared to oral or transdermal applications. The downsides of patches are that not everyone can tolerate them, they can cause soreness in the patch area and sometimes may peel away before the full dose is administered. As a patch is still a transdermal route it carries the same risks associated with all transdermal administration.

INJECTIONS: Injections are a popular way to get oestrogen as they only require a redose every 1-2 weeks whilst providing more safety than oral oestrogen without the extra hassle of patches or gels. Oestrogen levels via injection can fluctuate, with them starting very high just after the injection. High levels of oestrogen doesn't increase feminisation and high or fluctuating levels can cause mood swings, weight gain, hot flashes, anxiety or headaches/migraines.

TESTOSTERONE BLOCKERS

Please do not use this table as a basis to self-medicate, it can be very dangerous.

As a pill	Orally.	One pill to be taken daily.	The most common AA blocker is spironolactone (spiro) and is the one prescribed by the NHS*. This blocker stops the reception of testosterone and requires additional kidney tests along with your usual blood tests. Spiro is a diuretic so dehydration is a common risky side effect.
As a nasal spray	Sprayed into either the left or right nostril, one to two times per day.	Measured doses sprayed once into one nostril in the morning and again in the other nostril in the evening, 12 hours apart.	Unfortunately whilst sprays are safe and effective they are usually expensive.
As an injection	Injected under your skin or into a muscle.	To be injected monthly by a healthcare professional.	

****Finasteride is also commonly prescribed orally and will probably be the 'blocker' you are first given. Finasteride doesn't really block testosterone and has anecdotally been reported as dangerous if used for extended periods of time. These claims of it being dangerous aren't always backed up however I would strongly suggest refusing finasteride if initially offered it and opting for a much more effective suppressant.***

Testosterone blockers such as spiro may put the body under unnecessary strain, it is possible to reduce testosterone to female levels by having an orchiectomy. This is a surgery in which the testicles are removed, it can be done in such a way that it does not affect future GRS surgery via minimising scar tissue. It is generally a safe procedure however it is important to note that once completed you would be dependent on oestrogen medications for the rest of your life. If you stop taking your medication you will experience menopausal like effects as well as potentially develop serious health conditions, such as osteoporosis. Options for surgery are either through a private practise, which will cost around £3000-£4000 or through referral from the NHS once a formal diagnosis of gender dysphoria has been given.

RISKS OF TESTOSTERONE BLOCKERS BY MEDICATION.

PILLS: The most commonly prescribed oral testosterone blocker is Spironolactone. Spiro blocks the reception of testosterone within the body but it also causes the kidneys to eliminate unneeded water and sodium through urine. This can lead users to become dehydrated a lot quicker than usual which can lead to its own set of side effects. Spiro limits the amount of potassium that is expelled from the body so it is advised to not eat too many potassium rich foods or take potassium supplements. Spiro also lowers blood pressure, so must be well considered if the individual has a history of low blood pressure. It's important to drink plenty of water whilst taking spiro and to have additional kidney tests done with your routine blood tests.

The list of potential relevant side effects to MtF transition are as follows:

Vomiting.

Diarrhoea.

Stomach pain or cramps.

Enlarged or painful breasts in men or women.

Difficulty maintaining or achieving an erection.

Drowsiness.

Tiredness.

Restlessness.

Potential serious side effects of Spiro are:

Muscle weakness, pain or cramps.

Pain, burning, numbness, or tingling in the hands or feet.

Inability to move arms or legs.

Changes in heartbeat.

Confusion.

Nausea.

Extreme tiredness.

Dry mouth, thirst, dizziness, unsteadiness, headache, or other signs of dehydration.

Unusual bleeding or bruising.

Lack of energy.

Loss of appetite.

Pain in the upper right part of the stomach.

Yellowing of the skin or eyes.

Flu-like symptoms.

Rash.

Hives.

Itching.

Difficulty breathing or swallowing.

Vomiting blood.

Blood in stools.

Decreased urination.

Fainting.

**** It is advised to immediately call your doctor if you experience any of these symptoms, however it is important to remember that it's common to experience muscles atrophying and a lack of energy, especially early on in your transition. If any of these are severe you should contact your healthcare provide immediately. ****

SPRAYS/INJECTION: The main risks of sprays/ injections would be a severe allergic reaction to the medication, although this is very rare. There are no serious side effects listed on my personal T blocker medication (Synarel) though that does not mean they are perfect. It's important to monitor your health and hormones with blood tests a minimum of every 3 months. Do not take testosterone blockers without an oestrogen medication as having both sex hormones be low is dangerous long term.

PROGESTERONE

There is a lot of mis-information about progesterone and how it is prescribed. It is often stated, anecdotally, that progesterone helps with mood regulation, maintaining a healthy sex drive and better development of the breasts.

Progesterone is usually prescribed as a pill/capsule to be taken orally. It is important to make sure the progesterone you are getting is bio-identical, as well as micronized if you wish to take it orally, as it has a better chance of being absorbed by the body through the intestines without having to prescribe very high amounts.

Progesterone has weak bio-availability when taken orally, meaning levels will peak early and will be out the body quickly. The half life of progesterone taken orally is 5-10 hours when taken with food. Usually doctors will suggest you take your progesterone at night as side effects can include drowsiness, dizziness and nausea however by the time you wake up levels of progesterone in your blood will have halved and you may experience some menopausal style symptoms. Another recommendation is that you should avoid taking progesterone on an empty stomach as it can increase the bio-availability. If you can handle the potential side effects (personally, for reference, the side effects of progesterone are pretty similar to taking the drug Xanax but for a lot less time) it is worth taking your medication with food, fatty foods especially will increase the bio-availability and allow for higher levels of progesterone in your blood for longer periods of time.

I personally split my oral progesterone dose taking 100mg in the morning and 100mg at night, with food where possible.

If you would prefer to get the most from your progesterone there is the option to take certain pills rectally. Placing the pill roughly 2 inches inside your rectum before bed will provide a much larger bio-availability with more consistent, higher levels of progesterone.

PROGESTERONE RISKS

The risks associated with progesterone are largely associated and reported by cis women taking progesterone for HRT treatment, risks to trans women or young women are less studied.

You must stop taking Progesterone and see a doctor immediately if you experience any of these symptoms:

Yellowing of your skin or whites of your eyes.

A large rise in blood pressure.

Migraine-like headaches which happen for the first time.

Sudden or gradual, partial or complete loss of vision.

Forward displacement of the eye (proptosis) or double vision (diplopia).

Swelling of the optic nerve.

Eye disease.

If you notice signs of a blood clot.

PUBERTY BLOCKERS

Puberty blockers are used to pause puberty to either give yourself time to come to terms with your gender identity or to avoid experiencing the wrong kind of puberty for your identity. Puberty blockers aren't relevant if you have already started or been through puberty.

There are two kinds of puberty blockers, either a flexible rod (histrelin acetate) is placed under your arm which blocks puberty for one year or a leuprolide acetate injection which can work for 1 - 4 months depending on the dose.

The risks associated with puberty blockers are minimal, aside from potential mild discomfort (headaches, tiredness, aches) there are some possible long term risks:

- Lower bone density. This can be easily prevented with exercise, calcium, vitamin D and monitoring by your healthcare professional.
- Delayed growth plate closure which may result in a slightly taller adult height.
- Less development of genital tissue, note that this could limit your options for gender affirming surgery as the penis will not fully develop.

Puberty blockers are reversible, if you decided you would rather develop into the gender you were assigned at birth all you have to do is stop taking the medication.

WHAT CHANGES TO EXPECT AND WHEN:

Most of these changes begin to occur/properly develop when hormone levels are within female range.

Below is an overall view of the types of changes and when to expect them via Wikipedia.

Effects of feminizing hormone therapy in transgender women

Effect	Time to expected onset of effect ^[a]	Time to expected maximum effect ^{[a][b]}	Permanency if hormone therapy is stopped
Breast development and nipple/areolar enlargement	2–6 months	1–3 years	Permanent
Thinning/slowed growth of facial/body hair	4–12 months	>3 years ^[c]	Reversible
Cessation/reversal of male-pattern scalp hair loss	1–3 months	1–2 years ^[d]	Reversible
Softening of skin/decreased oiliness and acne	3–6 months	Unknown	Reversible
Redistribution of body fat in a feminine pattern	3–6 months	2–5 years	Reversible
Decreased muscle mass/strength	3–6 months	1–2 years ^[e]	Reversible
Widening and rounding of the pelvis ^[f]	Unspecified	Unspecified	Permanent
Changes in mood, emotionality, and behavior	Unspecified	Unspecified	Reversible
Decreased sex drive	1–3 months	3–6 months	Reversible
Decreased spontaneous/morning erections	1–3 months	3–6 months	Reversible
Erectile dysfunction and decreased ejaculate volume	1–3 months	Variable	Reversible
Decreased sperm production/fertility	Unknown	>3 years	Reversible or permanent ^[g]
Decreased testicle size	3–6 months	2–3 years	Unknown
Decreased penis size	None ^[h]	Not applicable	Not applicable
Decreased prostate gland size	Unspecified	Unspecified	Unspecified
Voice changes	None ^[i]	Not applicable	Not applicable

This table is useful for getting an overall feel for the types of changes to expect and whether they could be reversed should you choose not to continue with your transition.

A more expansive list of changes and potential changes:

- Breast development.** Usually, one of the first changes to develop and will begin to develop before hormone levels are fully in the female range. Begins with sore, breast buds that grow over time. The fastest growth is within the first 6 months. Breasts will be painful, and it is normal to experience hard, often painful lumps. Breast growth is one of the few permanent changes associated with HRT.

- **Slowed facial & body hair.** Facial hair will begin to slow down but at no point will it stop completely without the aid of laser hair or electrolysis. Body hair will begin to slow, get less thick and even potentially grow more in line with female patterns. If male puberty is avoided, thicker, darker hair will also be avoided.
- **Reversal of male pattern hair loss.** Lower testosterone levels will allow for more hair growth on the scalp.
- **Softening of skin, less oil & reduction of acne.** This is usually the next changes you will notice after breast growth. Acne is usually cleared up by having testosterone within female range, however if your acne isn't hormonal this won't be the case. Less oil production can lead to dry skin so it's a good suggestion to get a moisturiser to use morning and evening as well as after bathing. If you have white skin your skin will become paler and more transparent. I am unsure as to whether these changes effect darker skin tones in the same way, however testosterone darkens the colour of the skin as well as makes it thicker, so it's likely the same experiences will occur in PoC trans femmes.
- **Redistribution of body fat in a feminine pattern.** Unfortunately, this is one of the slowest processes. Oestrogen will switch your body processes into storing more fat as well as burning less, for best results some trans women lose weight when beginning medication and then gain weight when their hormone levels are within female ranges. Please be aware that rapidly fluctuating weight can be damaging to the body and must be done slowly and safely, please do not go below 1200 calories even when trying to lose weight. *Eating disorders have the highest death rate of any mental health condition and professional help should be sought if you feel you may be developing one. Please do not keep it to yourself, you are not alone.* Feminine fat distribution will happen no matter what, with your body burning fat in 'male' places before it burns fat in the new areas. It is completely okay to exercise whilst on HRT without affecting results of fat distribution, if anything it helps! Please note that on average individuals who experienced male puberty will have larger ribs which may make breast and hip growth seem smaller than it actually is. In my personal experience fat distribution doesn't begin until testosterone is suppressed into the female range. Fat distribution is a key factor in social passing as it can completely change your facial shape and figure, if you are worried you may not look "female enough" these

changes may greatly benefit your mental health and ease potential dysphoria. Facial fat distributes largely around the cheeks, jawline and under the eyes.

PRE TRANSITION:



5 MONTHS HRT: Skin is only slightly softer, fat distribution remains largely unchanged.



11 MONTHS HRT WITH MAKEUP:



11 MONTHS HRT WITHOUT MAKEUP: skin is softer and clearer, fat distribution is much more apparent. Eye shape has also changed.



Decreased muscle mass/strength. Decreased muscle mass and strength is a guaranteed effect of MtF HRT. If you are worried about having too much muscle mass before transitioning the effects can be quite drastic, muscle deteriorates anyway without constant use and the lack of testosterone will aid in this. You do not need to diet to lose muscle. It will happen regardless, if you would like to speed up your muscle loss consider cardio exercises and do not engage in muscle strengthening exercises. Alternatively if you are worried about losing muscle mass or would like to keep some strength for specific hobbies you can look to weight training as usual (starting from a much lower weight than normal, working upwards as to not injure yourself). Without weight training specific muscle groups it is unlikely that you will get definition from just regular exercise, if you are trying to avoid looking 'ripped' consider increasing your calories, as definition is most associated with slimmer builds. In other words; it is perfectly okay to exercise regularly without fearing that you will look 'too masculine' or ruin your progress. However it would be best to save strength training until after female hormone levels are reached.

- **Changes in mood, emotions and behaviour.** This specific change is very individual and anecdotal. There is scientific evidence backing up HRT changes the patterns of the brain to be more in line with cis females under an MRI. Personally, I have seen major shifts in my emotions, my moods and my behaviour but almost zero changes in my personality. Personality changes such as social anxiety or not enjoying things you used to may occur, but may also be due to societal pressure; personally I am a lot less outgoing when outside than I ever used to be, but this is due to scary interactions earlier in my transition (as well as constant re affirmations of my countries inbuilt transphobia) and not associated with HRT directly. You may feel you cannot do more 'masculine' hobbies you used to enjoy, or you may realise these hobbies were only there as a distraction. HRT will allow you to feel a wider range of emotions compared with testosterone, you may experience lower lows and higher highs and may be able to empathise more with others. Transitioning allows you to rid yourself of toxic masculinity, allowing yourself to enjoy a wider range of hobbies and media without perceived judgement from peers. If you find yourself constantly moody and irritable(which can be a period of time during your early transition as your body adjusts) try to make your friends and loved ones aware as well as be patient with

yourself and others. If you are constantly feeling irritable, sad or depressed consider getting your blood results checked or speaking to your healthcare provider. Low oestrogen and testosterone is draining on the body and can lead to some of these symptoms. If you are feeling irritable and your bloodwork seems fine consider adding progesterone into your prescription. Research into the effects of progesterone's effects while transitioning is still being researched, not every healthcare provider deems it necessary however it can be known to increase sex drive, improve breast shape and growth and improve moods. In my personal experience progesterone has very much helped on all three fronts. Reports that progesterone stops breast growth when taken too early is a myth, progesterone is present in cis female puberty and there is no conclusive evidence backing these claims.

- **Decreased sex drive.** Another change that will happen but to what extent will be different for each individual. Whilst your hormones are balancing out you may have a very low sex drive, if relevant, it is important to make your partner aware of this so you can best work through it at the start of your transition. Once your T & E levels are within female ranges your sex drive should return, although it may have changed. Some people report their sex drive returning much stronger, but it's likely that it'll either be similar or slightly reduced. Sex drive after transitioning is much different to before, whilst testosterone is your main sex hormone arousal may feel intense, overbearing and sometimes like a compulsion that must be fulfilled; when your T is reduced arousal will most likely become a slower, more intimate experience that no longer controls your thoughts. It may also be easier to calm down during arousal if climax is not reached, compared to common aggression or stress felt from testosterone. If your sex drive is constantly low it may be worth adding progesterone into your prescription as this has been known to improve this issue.
- **Changes with Orgasms.** A commonly reported change amongst transgender individuals on MtF HRT is that the way they orgasm changes. In this situation changes will be unique to you however it is common for orgasms to shift into a more classic female orgasm. New erogenous zones may develop across your body, particularly the nipple and breast regions. Orgasms can become more of a full body experience, with reports on climax changes ranging from more intense to less

intense than before. Orgasms may last longer and the overall sexual experience may feel more pleasurable, as well as this you may be able to climax multiple times in one sitting.

- **Decreased spontaneous/morning erections.** Testosterone is responsible for making sure the penis stays healthy and functioning, to do this the body produces multiple erections during sleep. Eventually your body will stop doing this due to oestrogen being the dominant hormone, it is important to note that this may not stop entirely, erections are not fully linked to testosterone and can happen for a variety of reasons throughout your transition, although it is unlikely they will happen a lot if at all without sexual stimulation. This may be a much sought-after side effect for a lot of transgender individuals but it is important to keep the genitals healthy if you plan to have genital reassignment surgery (GRS) in the future, or if you plan to have a sex life based around penetration (Not all trans individuals have bottom dysphoria and it is not required to hate your genitals to be trans.). If you do not wish to use your genitals but wish to keep them healthy enough for surgery it is recommended to maintain an erection at least once a week, to keep the skin and muscles elastic and functioning. If you wish to use it more often and don't have bottom dysphoria it is best to maintain an erection every few days. It is still possible to get an erection during sexual arousal even if you no longer get or give yourself erections, however these will most likely be painful as the muscles and skin will have shrunk.
- **Decreased penis size & erectile dysfunction.** This directly links to the above point, erections help keep the genitals healthy and in doing so keep it at a consistent size. If you no longer experience erections and do not give yourself erections regularly your penis will shrink and it may lead to erectile dysfunction. If you wish to avoid this it is best to follow the above advice on how to keep your genitals healthy. Erectile dysfunction is not a guaranteed outcome of HRT, especially if you actively keep your genitals in a working condition.
- **Decreased testicle size.** Testicles will shrink to about $1/3^{\text{rd}}$ their original size over the course of your HRT treatment, this change cannot be stopped and will not effect the quality of your GRS. It has been reported that the testicles sometimes ache during this process, and it is normal for them to increase and decrease in size during times that your hormones are imbalanced. Any major pain associated with your testicles

should be reported to your healthcare provider as they are not common of HRT treatment, it may seem embarrassing, but health is more important as some conditions can be serious.

- **Decreased fertility and sperm production.** HRT will affect your fertility, as mentioned earlier it is important to seek out options for sperm storage if you wish to have children or are unsure of what you may want in the future. It is possible that fertility may return if HRT is stopped but it is also possible that infertility is a permanent change. The amount of sperm you produce may lower significantly and may even stop altogether. It is normal on HRT for sperm production to be reduced, to be clearer and a lot more of a liquid consistency. Please note that although fertility will be affected it is important to continue to use protection to avoid unwanted pregnancy.
- **Voice changes.** Voice changes are unfortunately not possible with MtF HRT however it is possible to permanently change your voice through voice training exercises. Other trans women and I have reported altering their voice permanently by repeated practise and using a more feminine inflection in day to day speaking. It is possible to gain a more feminine voice through sheer consistent use however it is recommended to at least attempt voice training exercises, such as the ones laid out by Trans Voice Lessons on YouTube.
- **Spider veins.** Your skin will become more transparent through HRT and it may be possible to see previously unseen veins and spider veins. Alongside this oestrogen constricts veins, this can cause smaller veins closer to the skin to collapse and form spider veins. These are nothing to worry about and are a normal part of female life.
- **Reduction in height and shoe size.** HRT can shrink your ligaments and muscles leading to a reduction in your overall height as well as a decrease in shoe size. The process is gradual and, in some cases, only minor.
- **Hip bone growth.** If male puberty has not been attained then your hip bones are likely to grow into a more feminine shape. If you have been through male puberty but are under the age of 25 there is still a chance your hip bones grow.
- **Changes in scent and pheromones.** HRT changes the way you smell and the pheromones you produce into a more 'feminine' scent. You or your partner may notice you smell different or that you don't smell even after

exercising. This also extends to the genitals with some individuals reporting their scents shifting into a vaginal smell. Some trans femmes report being able to smell things a lot more intensely than before, with some smells becoming unpleasant or overpowering since transitioning.

- **Changes to sexuality.** Some individuals may become attracted to a sex different to the one they were originally attracted too before HRT. This can be linked to changes in the brain and pheromone reception however it can also be a psychological response to transitioning, allowing yourself to explore avenues you previously blocked off before.
- **Increase in headaches/migraines.** Due to fluctuating hormones it is possible to experience more frequent headaches or migraines, even if never experienced before. It is important to remember to take your medication at the same time each day and try not to miss doses to avoid these. Keeping healthy and hydrated is also a good way to reduce potential headaches and migraines.
- **Eye colour and vision changes.** Testosterone darkens the colour of your eyes so it is possible your eyes may lighten whilst undergoing HRT. There is also evidence to suggest your eyesight will change, the shape and angle of your eye lenses are controlled by hormones so it is possible that eyesight may get worse or improve whilst undergoing HRT. In my case my eyesight got worse and I had to get glasses to see long distance(they're cute tho xoxo).
- **Alcohol tolerance.** Although it's not recommended to drink more than 1-2 drinks on oral forms of Oestrogen due to its first pass through the liver it is possible to consume regular amounts of alcohol on certain HRT meds. For instance Oestrogen gel, Synarel and Progesterone capsules are a combination that doesn't result in any negative reactions with alcohol, your risks from alcohol with this combination will most likely fall within the same category as cis women. Women generally have a higher percentage of body fat and lower amounts of body water than men, this means that your tolerance for alcohol may significantly reduce on HRT and may result in more hangovers.

THINGS TO NOTE WHEN TRANSITIONING:

You are taking female hormones which in turn change aspects of your mood, brain and yes, biology. It is important to make sure you are getting the right care and are being compared to cis female levels when getting blood results/medication checked.

Oestrogen increases the amount of fat your body stores and the much smaller amount of testosterone atrophies your muscles, leading to a lower level of fat burned throughout the day. To stay healthy, you should reduce your calorie intake to the recommended maximum daily amount for adult women (2000Kcal per day) or under, based on what your body needs. (At no point should you be eating less than 1200 calories per day, as this is the minimum your body needs to function; a second puberty is just as hard as the first and may require more nutrients and rest). You should also maintain a healthy exercise routine where possible.

Cis women require more iron per day than cis men, however trans women do not require additional iron as it won't be lost through periods.

Although most healthcare providers only request blood tests to be done once every 3 months it is entirely down to you to get blood results done before this time period if you feel your hormone levels aren't quite right. On average it would be best to wait at least 1 full month before checking blood results after starting a new type of medication.

It is important to wait around 2-3 years before committing to any face or breast surgery. This is to allow time for your breasts and female facial features to develop properly before making any body altering decisions. It has been noted that breast implants before breasts are finished fully developing may create an uncomfortable size or result you are not happy with.

It is a transition and not a sprint, changes WILL happen when on the right dose of medication, try to appreciate each and every change as a step in the right direction, no matter how small.

TIPS FOR BINARY FEMALE PASSING:

There is no correct way to be trans nor is there a need to pass, however passing is important to many trans people as it's incredibly helpful to easing dysphoria. Here are a few basics to maximise your ability to pass:

Start/maintain a good skincare routine, washing your face twice daily and remembering to exfoliate is important to helping clear your skin and attaining a more feminine complexion.

Take good care of your hair, long hair is a big want for a lot of trans women so remembering to brush your hair every morning and night as well as not over-washing it can help keep it shiny and soft.

Dressing age appropriate is a crucial part of passing, whilst you may be excited to try as many styles as possible dressing too young or too old for your age group can make you stand out a lot more in public.

Learning makeup can really help your journey however, makeup isn't crucial! Not every woman uses makeup. Although it may seem difficult at first, starting simple and practising can really help you build skill. Try watching some tutorials and make sure you are matching your makeup to your skin type. Early on in my transition I found it helpful to use a pore blur cream to reduce my pores and a matte foundation to give my face a softer, smoother appearance.

IMPORTANT LINKS N' RESOURCES :

<https://transfemscience.org/>

<https://www.reddit.com/r/MtF/> (use the search bar to search almost any transition question and you'll get a ton of answers)

<https://www.nhs.uk/live-well/healthy-body/how-to-find-an-nhs-gender-identity-clinic/> (as much as it pains me to link the NHS)

<https://transhealthuk.noblogs.org/covid-19-private-clinics/>(UK)

<https://genderkit.org.uk/>(UK)

<https://transequality.org/know-your-rights/health-care> (USA)

<https://www.plannedparenthood.org/planned-parenthood-mar-monte/patient-resources/gender-affirming-care> (USA)

<https://www.gendergp.com/bridging-hormones/> (UK/EU)