Feminizing Hormones

This handout provides information on estrogen therapy. If you have questions about the information provided here, please contact 314-362-3500 option 2.

Laboratory Testing Schedule
Bloodwork must be done often to check if the current medicine dose is working and is safe. If labwork is not done as often as instructed, your dose may not be increased and you may not see as good of results.

Labs are drawn:
- Before starting hormone therapy
- Every 3 months for the first year
- Once every 6 months after the first year of therapy

Tips on getting started:
- Estrogen therapy may require prior authorization from your insurance before the pharmacy fills the prescription.
- If you are interested in sperm banking, you should do this before starting medicine. This can take several months to complete. Please let us know if you would like a referral.
- Once the prescription is picked up, call our office at 314-362-3500 to make a 3 month follow-up appointment.

### Feminizing Effects from Estrogen Therapy

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
<th>Reversibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-3 years</td>
<td>Reversible</td>
</tr>
<tr>
<td>Decreased muscle mass/ strength</td>
<td>3-6 months</td>
<td>1-2 years</td>
<td>Reversible</td>
</tr>
<tr>
<td>Softening of skin/decreased oiliness</td>
<td>3-6 months</td>
<td>unknown</td>
<td>Reversible</td>
</tr>
<tr>
<td>Decreased libido</td>
<td>1-3 months</td>
<td>3-6 months</td>
<td>Partially reversible</td>
</tr>
<tr>
<td>Decreased spontaneous erections</td>
<td>1-3 months</td>
<td>3-6 months</td>
<td>Partially reversible</td>
</tr>
<tr>
<td>Male sexual dysfunction</td>
<td>Variable</td>
<td>Variable</td>
<td>Partially reversible</td>
</tr>
<tr>
<td>Breast growth</td>
<td>3-6 months</td>
<td>2-3 years</td>
<td>Irreversible</td>
</tr>
<tr>
<td>Decreased testicular volume</td>
<td>3-6 months</td>
<td>2-3 years</td>
<td>Partially reversible</td>
</tr>
<tr>
<td>Decreased sperm production</td>
<td>Unknown</td>
<td>&gt;3 years</td>
<td>Partially reversible</td>
</tr>
<tr>
<td>Thinning/ slowed growth of body and facial hair</td>
<td>6-12 months</td>
<td>&gt;3 years</td>
<td>Reversible</td>
</tr>
<tr>
<td>Slowed loss of scalp hair (for those with male pattern baldness)</td>
<td>No regrowth, loss stopping is variable</td>
<td>1-2 years (familial scalp hair loss may occur if estrogens are stopped)</td>
<td>Reversible</td>
</tr>
</tbody>
</table>
**Risks of Estrogen Therapy**

- Increased risk of blood clots, which can result in deep vein thrombosis, pulmonary embolism stroke, heart attack, and chronic leg vein problems. **The risk is much higher if you smoke tobacco.**
- Increased risk of diabetes and heart disease by increasing fat deposition around internal organs.
- Increased risk of high blood pressure.
- Estrogen may increase LDL (bad cholesterol) and decrease HDL (good cholesterol).
- Increased risk of headaches or migraines.
- Estrogen may cause nausea and vomiting, similar to morning sickness in a pregnant woman.
- Increased risk of gallstones.
- It is unknown if estrogen therapy increases the risk of non-cancerous tumors of the pituitary gland.
- Please also be aware that there may be long-term risks to estrogen therapy that are not yet known.
- If you have any adverse reactions (including skin irritation) or concerns, please speak to our medical team.

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**Estrogen Patches**

- Wash your hands with soap and water before and after you use the patch.
- Apply to a clean, dry, and hair-free area of the lower abdomen or upper buttock area.
- **Do not** apply near your chest area. This can cause breast tissue to develop unevenly making one breast larger.
- **Change the patch twice a week.**
  - Remove the old patch and apply new patch to a different area.
  - Wait at least one week before applying a patch to the same area.
- If a patch falls off, put on a new patch in a different area, but continue to follow your original schedule for changing.
- **Do not** use on skin areas that have cuts, scrapes, or burns. If it does get on these areas, rinse it off right away with water. Do not apply over tattoos.
- **Do not** use powder, oil, or lotion. This makes it hard for the patch to stick to your skin.
- **Do not** expose it to the sun for long periods.

**Estrogen Injections**

- Estradiol may also be administered via intramuscular or subcutaneous injection. See additional information provided by your doctor for injection technique.

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**Sublingual Estrogen**

- While swallowing tablets causes estrogen to be absorbed and taken to the liver, the sublingual (under the tongue) route leads to direct absorption into the blood and higher estrogen levels.
- Estrogen metabolism in the liver leads to higher risk of blood clots, changes in lipids and risk of heart disease. The sublingual route is safer.

**To Take Sublingually:**

- Sit upright, swallow and clear mouth of saliva.
- Quickly place the tablet(s) under your tongue, on either side of the frenulum.
- The tablet will turn into a paste as it dissolves; try not to swallow too often while it dissolves.
- Wait 20-30 minutes for tablet(s) to fully dissolve.

**Helpful Tips**

- Do not move tongue to check if tablet has dissolved -- this introduces more saliva into area.
  - If you can taste estrogen, you are likely swallowing too often.
  - Do not eat/drink while tablet is dissolving.
  - Let us know if you develop sores at the site of the tablets.

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**Developed by Karen Hamon, RN; Updated 3/1/2021**