

## General Criteria for Non-Surgical Gender Affirming Procedures (WPATH SOC8)

- a. Gender incongruence is marked and sustained
- b. Meets diagnostic criteria for gender incongruence prior to procedure
- c. Demonstrates capacity to consent for the specific gender-affirming procedure
- e. Other possible causes of apparent gender incongruence have been identified and excluded
- f. Mental health and physical conditions that could negatively impact the outcome of gender-affirming intervention have been assessed, with risks and benefits have been discussed
- g. Stable on their gender affirming hormonal treatment regime (which may include at least 6 months of hormone treatment or a longer period if required to achieve the desired surgical result, unless hormone therapy is either not desired or is medically contraindicated).

## Criteria for Coverage of Feminizing Hair Removal (Laser & Electrolysis)

*ALL of the following criteria must be met in order for feminizing hair removal to be considered medically necessary:*

- a. Meets above general clinical criteria for non-surgical procedures
- b. Member has been counseled on risks and benefits, including risk of burns and scarring and what to do in the event of a burn or other complication
- c. Documentation member understands...
  - 1. Laser and electrolysis should not be done on the same area at the same time

2. Appropriate treatment intervals/not to receive additional treatment beyond recommended intervals via external providers
3. Available pain control options including topicals such as topical lidocaine and pre-procedure acetaminophen
4. Risks of sun exposure, especially if any scarring is present
5. Limitations of laser hair removal including inability to laser over tattoos, and what body hair is appropriate for laser versus electrolysis based on hair color and skin pigment

## General Guidance Feminizing Hair Removal

Hair removal via laser or electrolysis is an established feminizing practice that benefits transfeminine people's mental health (Bradford 2021, Lee 2021). Both are considered to be safe and effective treatments for hair removal, though electrolysis may require more sessions and can be more painful (Gan & Graber 2016, Görgü 2000, Yuan 2022 ). Insurance coverage for hair removal has expanded past limited coverage in the context of feminizing/masculinizing genital surgery (Downing 2021, Peloza 2021). Exposure to testosterone during puberty leads to the development of thicker, darker body hair as well as hair in areas that are typically hairless or nearly hair-less for people who undergo puberty in the presence of estrogen. These areas include the back, facial hair, arm hair, and chest hair. As such, removal of this hair has a feminizing effect.

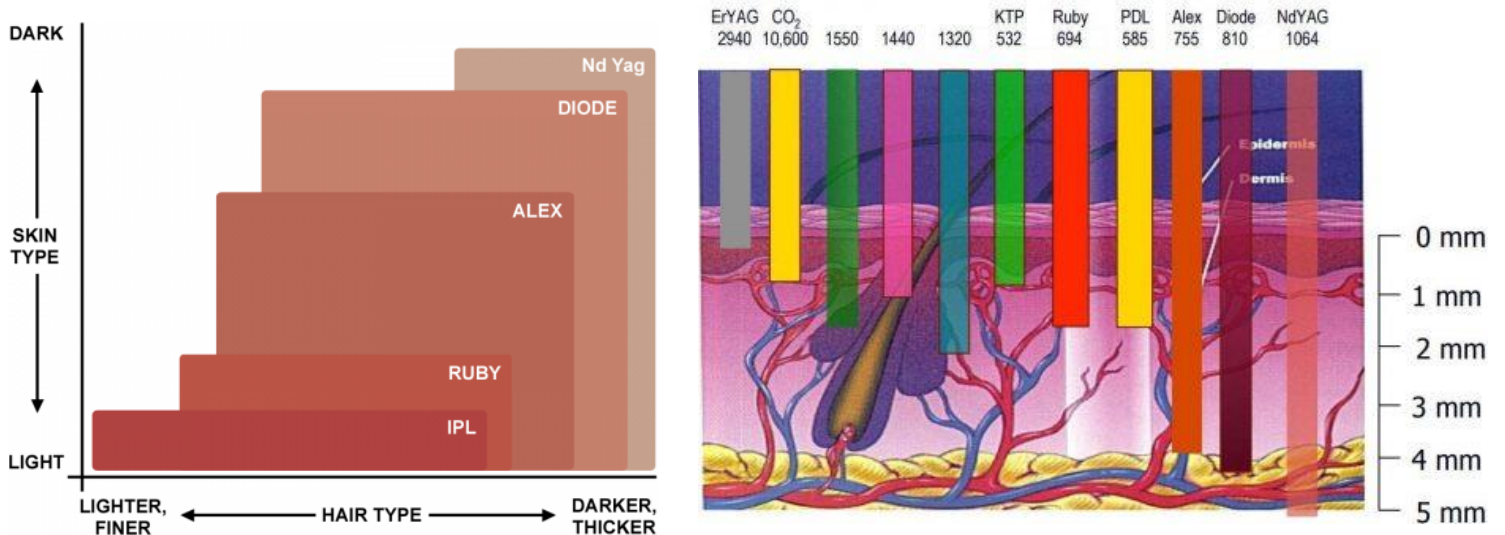
The FDA defines electrolysis as permanent hair removal while laser treatments are permanent hair reduction, though neither offer true permanent hair removal (Gupta 2014, Richards & Meharg 1995, Yuan 2022). Some may pursue electrolysis after laser to remove remaining hairs as laser can leave behind fine minimally pigmented hairs or patches requiring long-term maintenance sessions (Vaidya 2023). This is often necessary for people with mixed hair color, as lighter or grey/white hairs are not responsive to laser hair removal (Liew 2002).

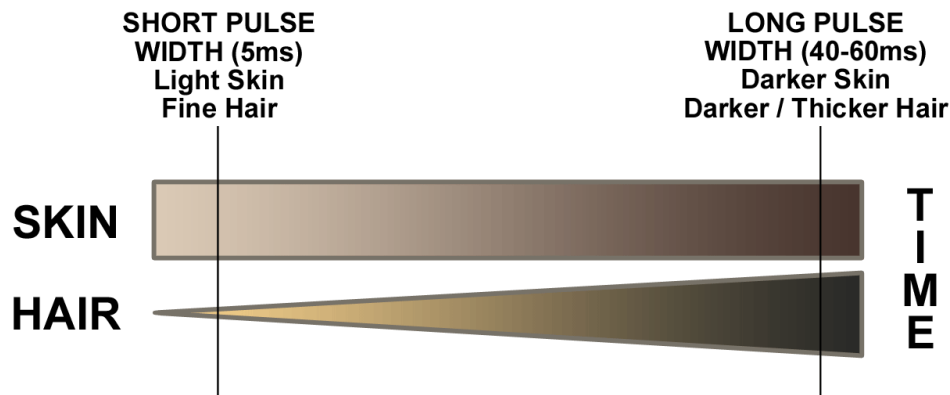
In addition to hair color, the melanin content or pigment of skin is also relevant to the efficacy of laser hair removal (Gan & Graber 2016, Liew 2002, Vaidya 2023). For the purposes of laser hair removal, the Fitzpatrick scale is the most utilized way of defining skin pigment, though it is an imperfect and subjective measure (Coleman 2023).



(Charlton 2020 - Image)

Several laser types exist, and different laser types are more or less appropriate for different skin pigments and hair colors. Deeper penetrating lasers like the Nd:YAG are better for darker skin and/or darker hair (Haedersdal 2011, Liew 2002). Fairer skinned or lighter haired people are better suited by lasers that do not penetrate the skin as deep such as alexandrite or diode lasers. The images below demonstrate the depth of penetration of different lasers, and what skin and hair types they are appropriate for (Holt 2024 - Image)





(Holt 2024 - Image)

Laser pulse width must also be adjusted to skin pigment and the color of the hair being treated, as shorter pulse widths may be more effective for finer hair but more dangerous for darker skin pigments (Haedersdal 2011).

The power of the laser is adjusted using the parameter of fluence, which can be defined as joules per square centimeter (Harderdal 2011). In general the best efficacy is seen with the highest tolerated fluence, though lighter skin (Fitzpatrick I and II) requires higher fluence and a shorter pulse duration while darker skin requires a lower fluence and longer pulse width for best efficacy and safety (Gupta 2014).

Different laser systems also have variable methods of cooling the skin during treatment. Some machines may use contact skin cooling, high-flow refrigerated air, or spray cryogen to cool the skin to increase comfort and reduce the risk of burns (Das 2016, Gan & Graber 2016).

Electrolysis is an alternative to laser that works for all skin pigments and hair colors, and can even remove hair overlying tattoos (Richards & Meharg 1995, Yuan 2022). This includes blonde, ginger, and white hair as well as darker skin tones. It is more painful and requires more time than laser, though if performed correctly it is safe and effective (Richards & Meharg 1995).

There are three ways to do electrolysis: Galvanic which is slow but very effective, thermolysis which is faster but ineffective, and a blend of the two which is the most common method (Richards & Meharg 1995).

## Adverse Events & Pain Control

The adverse events between laser hair removal and electrolysis are similar, though electrolysis tends to be associated with more pain and complications (Yuan 2022). Side effects of electrolysis can include pain, local edema, erythema, burns, scarring, and hyper or hypopigmentation changes (Wagner 1985).

Side effects of laser hair removal are usually heat-related events, which become more common when using higher fluences. Side effects can include local edema and tenderness, burns, blisters, crusting, scarring, ocular damage, or hyper or hypopigmentation changes especially in darker pigmented skin (Haedersdal 2011, Lim & Lanigan 2006, Mallat 2023, Nanni & Alster 1999).

Anesthetics can be used to make both laser hair removal and electrolysis more comfortable. Local injectable anesthetic may be used for electrolysis, and topical anesthetic preparations may be used for either procedure (Amionetti & Ribot-Ciscar 2016, Yuan 2022). Multiple topical preparations exist. There is mixed evidence comparing the efficacy of lidocaine-prilocaine to other mixtures, so overall, preparation selection should be based on accessibility and cost (Amionetti & Ribot-Ciscar 2016, Eremia & Newman 2000, Greveling 2017, Guardiano & Norwood 2005, Roongpisuthipong 2023).

Alternative pain control options such as pre-medication, ice packs, or vibration can be used in tandem or in lieu of anesthetic preparations (Amionetti & Ribot-Ciscar 2016, Roongpisuthipong 2023)

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