Greater Manchester Shared Services

Greater Manchester EUR Policy Statement

Title/Topic: Electrolysis and Laser Hair Removal for Hirsutism
Reference: GM014
Date: June 2015
Last Reviewed: August 2016

Greater Manchester Shared Services
Hosted by NHS Oldham CCG
on behalf of the Greater Manchester CCGs

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VERSION CONTROL

Version	Date	Details
0.1	30/06/2014	Initial draft
0.2	30/07/2014	• Amendments made following discussion by Greater Manchester EUR Steering Group on 09/07/2014: • Mandatory criteria amended to reflect that the policy applies to women aged 18 years and above. • A Ferriman Gallwey score of 9 for the 3 combined areas or 7 for the face and chin would be required (in red box). • Specifically state that only the areas in the red box would be funded. • The second and fourth bullet points under the 'refer for specialist opinion' removed and the final bullet point pilonoidal sinus moved under the mandatory criteria. • Funding mechanism agreed as IFR route in the first instance, although where a CCG has a list of preferred providers then referral can be made routinely. • First paragraph under Policy Exclusions regarding treatment for other areas of the body moved under the mandatory criteria.
0.3	25/09/2014 17/09/2014	• Amendments made following discussion by the Greater Manchester EUR Steering Group on 17/09/2014: • It was agreed to reduce the Ferriman Gallwey score for the face and chin area from 7 to 6. Policy approved for consultation by Greater Manchester EUR Steering Group subject to agreed amendment.
0.4	01/10/2014	Branding changed following creation of North West CSU on 01/10/2014.
1.0	21/11/2014	Amendments made following discussion of the Consultation feedback by the Greater Manchester EUR Steering Group on 19/11/2014: • Criteria amended to commission for functional reasons only. • The Ferriman-Gallwey scoring tool moved to Appendix 2, to be used only as a tool to help determine exceptionality. • Paragraph to request of non-compulsory photographs within the standard information required if applying for clinical exceptionality added. • Statement around transgender patients falling under NHS England under 'Policy Exclusions', as requested by the feedback. • Funding mechanism changed to IFR route only. Policy agreed by Greater Manchester EUR Steering Group subject to the above changes being made.
1.1	29/06/2015	• Variance column removed and funding mechanism column added to table. • Format of funding mechanism changed.
1.2	01/10/2015	For clarification and following agreement from the Greater Manchester EUR Steering Group in September 2015, addition made to the end of the sentence "Funding may be made available for patients meeting these criteria to receive up to 9 treatments only." in Section 4 under Mandatory Criteria, to read "…of laser hair removal or the equivalent number of electrolysis sessions up to an equivalent monetary value, for those individuals not suitable for laser hair removal."

1.3	06/04/2016	• List of diagnostic and procedure codes in relation to this policy added as Appendix 3. • Section 4 - Criteria for Commissioning - Mandatory Criteria reworded for clarity. Section A) applied to all patients. Section B) applies to women over the age of 18 only. All other treatment requests and requests for patients under 18 MUST be made via the IFR route. • Policy changed to Greater Manchester Shared Services template and references to North West Commissioning Support Unit changed to Greater Manchester Shared Services. • Wording for date of review amended to read *"One year from the date of approval by Greater Manchester Association Governing Group thereafter at a date agreed by the Greater Manchester EUR Steering Group (unless stated this will be every 2 years)"* on 'Policy Statement' and section '13. Date of Review'.
2.0	05/08/2016	Evidence reviewed June 2016 - the new papers found do not affect the current policy as access to laser hair removal is currently by exceptionality only unless it is being used to prevent recurrence of pilonidal sinuses. GM EUR Steering Group agreed: • Review date added to cover page and 'Policy Statement'. • The "Date of Review" on "Policy Statement" and in body of report changed to "Three years from the date of last review unless new evidence warrants earlier review." • The sentence "A modified version of this scoring system is shown in Appendix 2" removed from under the definition of "Hirsuitism". • The following paragraph was removed: *"Where the request is cosmetic and where clinicians feel there is a case for clinical exceptionality, hair removal will only be considered for excess hair affecting the face, neck and chest above the clavicle, covering the area that is exposed by the neckline of clothing (see diagram in red box in Appendix 2). A combined Ferriman-Gallwey score of 9 for the 3 areas or 6 for the face and chin must be confirmed. Funding may be made available for patients meeting these criteria to receive up to 9 treatments ONLY of laser hair removal OR the equivalent number of electrolysis sessions up to an equivalent monetary value, for those individuals not suitable for laser hair removal."* and replaced with *"Cosmetic requests are not funded unless exceptional"* • *"Cosmetic requests are not funded unless exceptional"* added to Commissioning Recommendation". • The following paragraph added to Summary of the Evidence and the Evidence Review: *"Evidence supports the effective, but currently short term, outcomes for laser therapy and notes its side effects. The HTA for Laser hair removal for prevention of pilonidal sinus recurrence focuses on compliance rather than overall effectiveness and suggests high rates of non-compliance.*" • Evidence added to the "Evidence Review section of the policy". • "Appendix 2 – Ferriman Gallwey Scoring System" removed and "Appendix 3" renamed "Appendix 2".
2.1	14/12/2016	Appendix 2: Y83.2 -Surgical operation with anastomosis, bypass or graft removed from the exceptions section
2.2	04/08/2017	Criteria for Commissioning: Note added for clarity re. referral for a specialist opinion after the bullet points for B)

POLICY STATEMENT

Title/Topic:	Electrolysis and Laser Hair Removal for Hirsutism

Issue Date:	June 2015

Reviewed:	August 2016

Commissioning Recommendation:	**<u>Mandatory Criteria</u>** Funding will be made available on an individual patient basis and prior approval should be sought from the Greater Manchester Shared Services EUR Team. **(Section 'A' applies to all patients & Section 'B' applies to women over the age of 18 only).** Electrolysis and Laser Hair Removal for Hirsutism is commissioned for functional reasons only: A) Where there is a history of recurrent pilonoidal sinus, with: • a history of one or more surgical treatments in the area. • a documented history of recurrent folliculitis. **OR** B) Refer for a specialist opinion to exclude a serious underlying condition causing the hirsuitism if: • hair growth is of recent onset and rapid progression. • the serum testosterone concentration is more than twice the upper limit of normal. **NOTE:** Referral for a specialist opinion would be for investigation and to treat the underlying condition only and not approval for electrolysis or laser hair removal. If the individual does require electrolysis or laser hair removal then a subsequent IFR application will be required. All other treatment requests and requests for patients under 18 **<u>must</u>** be made via the IFR route. Cosmetic requests are <u>not</u> funded unless exceptional. **See Section 4: Criteria for Commissioning**

Date of Review:	Three years from the date of last review unless new evidence warrants earlier review.

Prepared By:	Greater Manchester Shared Services Effective Use of Resources Policy Team

Approved By	Date Approved	Funding Mechanism
Greater Manchester Effective Use of Resources Steering Group	19/11/2014	GM EUR Steering Group recommended funding mechanism: Funding will be made available on an individual patient basis and prior approval should be sought from the Greater Manchester Shared Services EUR Team.
Greater Manchester Chief Finance Officers / Greater Manchester Heads of Commissioning	May 2015	N/A
Greater Manchester Association Governing Group	02/06/2015	N/A
Bury Clinical Commissioning Group	01/07/2015	Recommended mechanism above
Bolton Clinical Commissioning Group	26/06/2015	Recommended mechanism above
Heywood, Middleton & Rochdale Clinical Commissioning Group	17/07/2015	Recommended mechanism above
Central Manchester Clinical Commissioning Group	30/07/2015	Recommended mechanism above
North Manchester Clinical Commissioning Group	08/07/2015	Recommended mechanism above
Oldham Clinical Commissioning Group	02/06/2015	Recommended mechanism above
Salford Clinical Commissioning Group	02/06/2015	Recommended mechanism above
South Manchester Clinical Commissioning Group	24/06/2015	Recommended mechanism above
Stockport Clinical Commissioning Group	24/06/2015	Recommended mechanism above
Tameside & Glossop Clinical Commissioning Group	22/07/2015	Recommended mechanism above
Trafford Clinical Commissioning Group	21/07/2015	Recommended mechanism above
Wigan Borough Clinical Commissioning Group	20/06/2015	Recommended mechanism above

CONTENTS

Policy Statement

The Greater Manchester Shared Services (GMSS) has developed this policy on behalf of Clinical Commissioning Groups (CCGs) within Greater Manchester, who will commission Electrolysis and Laser Hair Removal for Hirsutism in accordance with the criteria outlined in this document.

In creating this policy the GMSS has reviewed this clinical condition and the options for its treatment. It has considered the place of this treatment in current clinical practice, whether scientific research has shown the treatment to be of benefit to patients, (including how any benefit is balanced against possible risks) and whether its use represents the best use of NHS resources.

This policy document outlines the arrangements for funding of this treatment for the population of Greater Manchester.

Equality & Equity Statement

The GMSS/CCG has a duty to have regard to the need to reduce health inequalities in access to health services and health outcomes achieved, as enshrined in the Health and Social Care Act 2012. The GMSS/CCG is committed to ensuring equality of access and non-discrimination, irrespective of age, gender, disability (including learning disability), gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender or sexual orientation. In carrying out its functions, the GMSS/CCG will have due regard to the different needs of protected characteristic groups, in line with the Equality Act 2010. This document is compliant with the NHS Constitution and the Human Rights Act 1998. This applies to all activities for which they are responsible, including policy development, review and implementation.

In developing policy the GMSS Policy Team will ensure that equity is considered as well as equality. Equity means providing greater resource for those groups of the population with greater needs without disadvantage to any vulnerable group.

The Equality Act 2010 states that we must treat disabled people as *more equal* than any other protected characteristic group. This is because their 'starting point' is considered to be further back than any other group. This will be reflected in GMSS evidencing taking 'due regard' for fair access to healthcare information, services and premises.

An Equality Analysis has been carried out on the policy. For more information about the Equality Analysis, please contact policyfeedback.gmscu@nhs.net.

Governance Arrangements

Greater Manchester EUR policy statements will be ratified by the Greater Manchester Association Governing Group (AGG) prior to formal ratification through CCG Governing Bodies. Further details of the governance arrangements can be found in the Greater Manchester EUR Operational Policy.

1. Introduction

This commissioning policy has been produced in order to provide and ensure equity, consistency and clarity in the commissioning of Electrolysis and Laser Hair Removal for Hirsutism by Clinical Commissioning Groups in Greater Manchester. When this policy is reviewed all available additional data on outcomes will be included in the review and the policy updated accordingly.

2. Definition

Hirsutism

Hirsutism is the abnormal growth of hair on a woman's face and body. This can be measured using the Ferriman Gallwey scoring system.

Laser Hair removal

A medical procedure that uses a laser - an intense, pulsating beam of light - to remove unwanted hair. During laser hair removal, a laser beam passes through the skin to an individual hair follicle. The intense heat of the laser damages the hair follicle, which inhibits future hair growth.

Electrolysis

The destruction of hair roots through the use of a mild electric current.

3. Aims and Objectives

Aim

This policy document aims to specify the conditions under which hair removal by electrolysis or laser for Hirsutism will be routinely commissioned by Clinical Commissioning Groups in Greater Manchester.

Objectives

- To reduce the variation in access to electrolysis and laser hair removal to treat Hirsutism.
- To ensure that hair removal therapies is commissioned where there is acceptable evidence of clinical benefit and cost-effectiveness.
- To reduce unacceptable variation in the commissioning of electrolysis and laser hair removal to treat Hirsutism across Greater Manchester.
- To promote the cost-effective use of healthcare resources.

4. Criteria for Commissioning

Mandatory Criteria

(Section 'A' applies to all patients & Section 'B' applies to women over the age of 18 only)

Electrolysis and Laser Hair Removal for Hirsutism is commissioned for functional reasons only:

A) Where there is a history of recurrent pilonoidal sinus, with:

- a history of one or more surgical treatments in the area.
- a documented history of recurrent folliculitis.

OR

B) Refer for a specialist opinion to exclude a serious underlying condition causing the hirsuitism if:

- hair growth is of recent onset and rapid progression.
- the serum testosterone concentration is more than twice the upper limit of normal.

NOTE: Referral for a specialist opinion would be for investigation and to treat the underlying condition only and not approval for electrolysis or laser hair removal. If the individual does require electrolysis or laser hair removal then a subsequent IFR application will be required.

All other treatment requests and requests for patients under 18 **MUST** be made via the IFR route.

Cosmetic requests are not funded unless exceptional.

Non-identifiable photographs, preferably medical illustrations if available, will also be requested, to support the decision making process, but will not form the sole basis of the decision. It is not mandatory for photographs to be provided by a patient.

Exceptionality requests that are non-cosmetic are not restricted to these areas.

Policy Exclusions

Hirsutism

Hair removal for clinical reasons, e.g. for a skin graft from a "hairy area" to an area that should not be hairy, or as part of a gender realignment pathway will be commissioned as part of that pathway and are not covered by this policy.

Hypertrichosis

Hair removal for Hypertrichosis is excluded from this policy and treatment should be considered as part of the hypertrichosis care pathway, as clinically indicated.

Gender Realignment

This is commissioned by NHS England as part of the care pathway.

Exceptionality

Clinicians can submit an Individual Funding Request (IFR) if they feel there is a good case for exceptionality.

Exceptionality means 'a person to which the general rule is not applicable'. Greater Manchester sets out the following guidance in terms of determining exceptionality; however the over-riding question which the IFR process must answer is whether each patient applying for exceptional funding has demonstrated that his/her circumstances are exceptional. A patient may be able to demonstrate exceptionality by showing that s/he is:

- Significantly different to the general population of patients with the condition in question.

and as a result of that difference

- They are likely to gain significantly more benefit from the intervention than might be expected from the average patient with the condition.

5. Description of Epidemiology and Need

The extent of terminal hair varies by ethnic background and the method used to evaluate it. http://bestpractice.bmj.com/best-practice/monograph/247/resources/references.html - ref-4Women of Far Eastern background have less body hair, as compared with southern European women. Among American women (white and black), the prevalence of hirsutism, as assessed by a standard score, is 20%.http://bestpractice.bmj.com/best-practice/monograph/247/resources/references.html - ref-5

This figure is based on the following study published in the J Clin Endocrinol Metab. 2006 Apr;91(4):1345-50. Epub 2006 Jan 31. Degree of facial and body terminal hair growth in unselected black and white women: toward a populational definition of hirsutism.

They found that an mFG (modified Ferriman Gallwey) score of at least 3 was observed in 22.1% of all subjects (i.e. the upper quartile); of these subjects, 69.3% complained of being hirsute, compared with 15.8% of women with an mFG score below this value, and similar to the proportion of women with an mFG score of at least 8 who considered themselves to be hirsute (70.0%). Overall, there were no significant differences between Black and White women.

6. Evidence Summary

Evidence supports the effective, but currently short term, outcomes for laser therapy and notes its side effects. The HTA for Laser hair removal for prevention of pilonidal sinus recurrence focuses on compliance rather than overall effectiveness and suggests high rates of non-compliance.

Hirsutism

The evidence shows that self-reported cases of Hirsutism are common. The most commonly used tool in assessing the degree of Hirsutism is the Ferriman Gallwey tool, however whilst this is a validated tool for use at a population level it should be used alongside clinical judgement at an individual level.

The available guidance suggests that the majority of cases of Hirsutism can be self-managed through waxing, shaving or the use of depilatory creams. Where there is a known underlying condition causing androgenism then this can be managed in primary care using the appropriate medication.

Where primary care treatment has failed then specialised advice can be sought usually from an endocrinologist.

In extreme cases or those where the standard treatment pathway has failed then electrolysis or laser hair removal (depending on skin and hair colour and relative risks of treatment) may be considered.

Pilonoidal Sinus

There is limited research evidence available for the use of laser hair removal (LHR) to prevent recurrence of pilonidal disease. Available studies found that the recurrence rate decreases significantly with the use of laser hair removal thus avoiding the need for further surgery and improving the quality of life for the patients. Although the evidence is very limited it is consistent in its findings that laser hair removal significantly reduces recurrence and the subsequent need for further surgical intervention.

Ideally further studies should be carried out; however the marked difference in outcome may make these ethically difficult to conduct. In the Control study cited of the 15patients treated with LHR, none were found to have recurrence of the condition, whereas 7 out of the 10 patients not treated presented with recurrent disease.

Full details of the Evidence Review are contained with Appendix 1.

7. Rationale behind the Policy Statement

Hirsutism is a relatively common condition which, for the most part, can be safely managed at home with over the counter methods of hair removal (shaving, waxing and depilatory creams). For women with suspected androgenism, e.g. where polycystic ovaries have been diagnosed the majority can be managed with the appropriate medication. Electrolysis and laser hair removal are considered predominantly cosmetic therapies and are not without the risk of side effects, e.g. scarring.

As a result of this, electrolysis and laser hair removal are not routinely commissioned by the NHS locally but may be provided in exceptional circumstances or for extreme cases were all other treatments have been tried and failed (or been discontinued due to side effects / complications of treatment).

8. Adherence to NICE Guidance

NICE have not currently issued guidance on this treatment.

9. Mechanism for Funding

Clinical Commissioning Group	Funding Mechanism
Bolton Bury Heywood, Middleton & Rochdale Manchester Central Manchester North Manchester South Oldham Salford Stockport Tameside & Glossop Trafford Wigan	Funding will be made available on an individual patient basis and prior approval should be sought from the Greater Manchester Shared Services EUR Team.

10. Audit Requirements

There is currently no national database. Service providers will be expected to collect and provide audit data on request.

11. Documents which have informed this Policy

Greater Manchester Effective Use of Resources Operational policy.

12. Links to other Policies

This policy follows the principles set out in the ethical framework that govern the commissioning of NHS healthcare and those policies dealing with the approach to experimental treatments and processes for the management of individual funding requests (IFR).

Greater Manchester Medicines Management Group (GMMMG): Interface Prescribing & New Therapies Subgroup - New Therapies Recommendation: Eflornithine 11.5% cream (Vaniqa®) for the treatment of facial hirsutism in women.

13. Date of Review

Three years from the date of last review unless new evidence warrants earlier review.

14. Glossary

Term	Meaning
Androgenism	The development of male characteristics, including body hair, the genital organs and muscle mass.
Hirsutism	The abnormal growth of hair on a woman's face and body.
Hypertrichosis	Aan abnormal amount of hair growth over the body; extensive cases of hypertrichosis have informally been called werewolf syndrome.

	Congenital hypertrichosis lanuginosa refers to a condition in which hypertrichosis occurs as a generalized and confluent presentation of hair across the body except in regions where hair is not normally found at all (glans penis, labia minora, lips, tips of fingers, palms and soles). The hair is usually silvery grey to blond in colour and grows away from the midline. The condition may be associated with dental problems, infantile genatalia, and growth and mental retardation, but in most cases does not carry these associations. A subtype of congenital hypertrichosis lanuginosa include ambras syndrome (or hypertrichosis universalis congenita) in which there is persistent, confluent long hair (4 to 10 inches in length) especially over the shoulders and face. Unusual facial features may be present under the long hair, and accessory nipples may also be found.
Pilonoidal Sinus	A sinus tract which commonly contains hairs. It occurs under the skin between the buttocks (the natal cleft) a short distance above the back passage (anus). The sinus track goes in a vertical direction between the buttocks. Rarely, a pilonidal sinus occurs in other sites of the body.
Polycystic ovaries (polycystic ovarian syndrome (PCOS))	A common condition that affects how a woman's ovaries work. PCOS affects millions of women in the UK. The three main features of the condition are: • cysts that develop in your ovaries (polycystic ovaries) • your ovaries do not regularly release eggs (ovulate) • having high levels of "male hormones" called androgens in your body

References

1. Eflornithine 11.5% cream (Vaniqa®) for the treatment of facial hirsutism in women, The Greater Manchester Medicines Management Group, http://gmmmg.nhs.uk/docs/nts/NTS%20Eflornithine%20cream%20for%20Facial%20hirsuitism.pdf#search=%22Eflornithine%22 [accessed 30/06/2014].

Appendix 1 – Evidence Review

Title/Topic: Electrolysis and Laser Hair Removal for Hirsutism
Ref: GM014

Search Strategy

Searches were carried out for Hirsutism and Hypertricosis then restricted to guidelines and or guidance using the following databases.

Database	Result
NICE	No guidance – hypertrichosis only mentioned as a treatment side effect.
NHS Evidence and NICE CKS	• NICE CKS: Hirsutism • York CRD Review (see section below) • Individual drug studies (not cited), patient.co.uk and BNF websites (not cited)
SIGN	Nil specific - hypertrichosis only mentioned as a treatment side effect.
Cochrane	Nil found
York (CRD)	**A systematic review of commonly used medical treatments for hirsutism in women** Koulouri O, Conway GS **Laser hair removal for prevention of pilonidal sinus recurrence** Lansdale: HAYES, Inc.. Healthcare Technology Brief Publication. 2014 (Added at review: Jul 2016)
BMJ Clinical Evidence	Endocrine Society guidelines (see below)
BMJ Best Practice	• **Evaluation and Treatment of Hirsutism in Premenopausal Women: An Endocrine Society Clinical Practice Guideline** The Journal of Clinical Endocrinology & Metabolism, Vol. 93, issue 4, pages 1105-1120, 2008 • **BMJ Best Practice Guidance: Pilonidal Disease** (web based)
General Search (Google)	BMJ guidelines and Endocrine society guidelines. Patient.co.uk website and NICE CKS (all cited in other sections)
Medline / Open Athens	• **Successful treatment of recurrent pilonidal sinus with laser epilation** Landa N, Aller O, Landa-Gundin N, Torrontegui J, Azpiazu JL Dermatol Surg. 2005 Jun;31(6):726-8 Source: Dermitek Clinic of Laser, Dermatology and Aesthetic Surgery, Bilbao, Basque Country, Spain. dermitek@dermitek.com • **Effect of hair removal by Nd:YAG laser on the recurrence of pilonidal sinus** Badawy EA, Kanawati MN J Eur Acad Dermatol Venereol. 2009 Aug;23(8):883-6. doi: 10.1111/j.1468-3083.2009.03147.x.

	Source: Faculty of Medicine, Alexandria University, Egypt. ezzatbadawy@yahoo.com • **Evaluation of 60 Patients with Pilonidal Sinus Treated with Laser Epilation after Surgery** Oram Y, Kahraman F, Karincaoğlu Y, Koyuncu E Dermatol Surg 2010;36:88–91
Other: Royal College of Physicians British Association of Dermatologists	**Hirsutism leaflet** (cited below) plus links to other websites in the US and New Zealand (not cited)
BMJ Website	**BMJ Clinical Review: Management of Hirsutism** Olympia Koulouri, Gerard S Conway BMJ 4 April 2009 Volume 338
NHS England Commissioning Policy	Treatment of low clinical value not routinely commissioned exceptional case only commissioned by IFR application.
BAAPS website	**Patient information leaflet: Laser hair removal** British Association of Aesthetic and Plastic Surgeons (BAAPS) (Added at review: Jul 2016)

Summary of the evidence

Evidence supports the effective, but currently short term, outcomes for laser therapy and notes its side effects. The HTA for Laser hair removal for prevention of pilonidal sinus recurrence focuses on compliance rather than overall effectiveness and suggests high rates of non-compliance.

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The evidence shows that self-reported cases of hirsutism are common. The most commonly used tool in assessing the degree of hirsutism is the Ferriman Gallwey tool however whilst this is a validated tool for use at a population level it should be used alongside clinical judgement at an individual level.

The available guidance suggests that the majority of cases of hirsutism can be self-managed through waxing, shaving or the use of depilatory creams. Where there is a known underlying condition causing androgenism then this can be managed in primary care using the appropriate medication.

Where primary care treatment has failed then specialised advice can be sought usually from an endocrinologist.

In extreme cases or those where the standard treatment pathway has failed then electrolysis or laser hair removal (depending on skin and hair colour and relative risks of treatment) may be considered.

Pilonoidal Sinus

There is limited research evidence available for the use of laser hair removal (LHR) to prevent recurrence of pilonidal disease. Available studies found that the recurrence rate decreases significantly with the use of laser hair removal thus avoiding the need for further surgery and improving the quality of life for the patients. Although the evidence is very limited it is consistent in its findings that laser hair removal significantly reduces recurrence and the subsequent need for further surgical intervention.

Ideally further studies should be carried out; however the marked difference in outcome may make these ethically difficult to conduct. In the Control study cited of the 15 patients treated with LHR, none were

found to have recurrence of the condition, whereas 7 out of the 10 patients not treated presented with recurrent disease.

The evidence

Levels of evidence	
Level 1	Meta-analyses, systematic reviews of randomised controlled trials
Level 2	Randomised controlled trials
Level 3	Case-control or cohort studies
Level 4	Non-analytic studies e.g. case reports, case series
Level 5	Expert opinion

1. LEVEL 1: SYSTEMATIC REVIEW
A systematic review of commonly used medical treatments for hirsutism in women
Koulouri O, Conway GS

Twenty eight studies (n=1,226) were included in the review. Six were double-blind and seven were single-blind RCTs.

Significant improvements in mean F-G score were seen for all treatment groups. Baseline F-G score showed a positive correlation with change in F-G score after six months ($r=0.46$, $p<0.001$) across all studies, but not in the analyses of individual treatments. A negative correlation between body mass index and change in F-G score was observed for the analysis of all studies ($r=-0.38$, $p=0.004$) and for oral contraceptive pill alone ($r=-0.67$, $p=0.05$).

Authors' conclusions: The evidence showed that seven different drug groups showed improvements in hirsutism. Creative use of these could provide greater benefits for women with this condition. Obesity had a negative impact on treatment efficacy and appropriate lifestyle advice should be given to women to enable a successful treatment programme.

For treatment recommendations based on this see BMJ review below.

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2. LEVEL N/A: GUIDANCE (BASED ON AN EVIDENCE REVIEW)
Evaluation and Treatment of Hirsutism in Premenopausal Women: An Endocrine Society Clinical Practice Guideline
The Journal of Clinical Endocrinology & Metabolism, Vol. 93, issue 4, pages 1105-1120, 2008

Summary of Recommendations

1.1. Diagnosis of hirsutism

1.1.1. We suggest against testing for elevated androgen levels in women with isolated mild hirsutism because the likelihood of identifying a medical disorder that would change management or outcome is low

1.1.2. We suggest testing for elevated androgen levels in women with

- Moderate or severe hirsutism

- Hirsutism of any degree when it is sudden in onset, rapidly progressive, or when associated with any of the following:
  - menstrual irregularity or infertility
  - central obesity
  - acanthosis nigricans
  - rapid progression
  - clitoromegaly

2.0 Treatment of hirsutism in premenopausal women

a. For women with patient-important hirsutism despite cosmetic measures, we suggest either pharmacological therapy or direct hair removal methods The choice between these options depends on (a) patient preferences, (b) the extent to which the area of hirsutism that affects wellbeing is amenable to direct hair removal, and (c) access to and affordability of these alternatives.

b. Pharmacological treatments

i. Monotherapy

2.1.1.1 For the majority of women, we suggest oral contraceptives to treat patient-important hirsutism; because of its teratogenic potential, we recommend against antiandrogen monotherapy unless adequate contraception is used.

2.1.1.2 For women who cannot or choose not to conceive, we suggest the use of either oral contraceptive preparations (OCPs) or antiandrogens. The choice between these options depends on patient preferences regarding efficacy, side effects, and costs.

2.1.1.3 We suggest against the use of flutamide therapy.

2.1.1.4 We suggest against the use of topical antiandrogen therapy for hirsutism.

2.1.1.5 We suggest against using insulin-lowering drugs as therapy for hirsutism.

2.1.1.6 For women with hirsutism who do not have classic or nonclassic congenital adrenal hyperplasia due to 21-hydroxylase deficiency (CYP21A2), we suggest against glucocorticoid therapy We suggest glucocorticoids for women with hirsutism due to nonclassic congenital adrenal hyperplasia (NCCAH) who have a suboptimal response to OCPs and/or antiandrogens, cannot tolerate them, or are seeking ovulation induction.

2.1.1.7 We suggest against using GnRH agonists except in women with severe forms of hyperandrogenemia, such as ovarian hyperthecosis, who have a suboptimal response to OCPs and antiandrogens.

2.1.1.8 For all pharmacologic therapies for hirsutism, we suggest a trial of at least 6 months before making changes in dose, changing medication, or adding medication.

ii. Combination therapy

1. If patient-important hirsutism remains despite 6 or more months of monotherapy with an oral contraceptive, we suggest adding an antiandrogen.

c. Direct hair removal methods

i. For women who choose hair removal therapy, we suggest laser/photoepilation. For women undergoing photoepilation therapy who desire a more rapid initial response, we suggest adding eflornithine cream during treatment. For women with known hyperandrogenemia who choose hair removal therapy, we suggest pharmacologic therapy to minimize hair regrowth

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3. LEVEL N/A:CLINICAL REVIEW
BMJ Clinical Review: Management of Hirsutism
Olympia Koulouri, Gerard S Conway
BMJ 4 April 2009 Volume 338

- Hirsutism is a common and distressing condition
- The underlying cause is usually polycystic ovary syndrome
- Serum testosterone measurements are not needed in most cases
- Topical and systemic treatments or combinations of the two can adequately control hirsutism in most cases
- Allow four to six months for any treatment to be effective

When to refer to a specialist:

- If hirsutism is particularly severe
- If hair growth is of recent onset and rapid progression
- If first and second line treatments have not been effective over six to 12 months
- If the serumtestosterone concentration is more than twice the upper limit of normal
- If the presence of the metabolic syndrome requires a multidisciplinary approach

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4. LEVEL 4: EXPERT OPINION
British Association of Dermatologists Hirsutism leaflet

Summary

It is important to see your doctor if your hirsutism is associated with any of the following:

- Developing quickly (over 1-2 years), or before puberty;
- Accompanied by menstrual problems;
- Associated with features suggesting an increase in androgens such as thinning of the scalp hair, baldness, or deepening of the voice;
- Accompanied by obesity or diabetes.

Managing Hirsutism

Self-care (what can I do?)

- *Shaving.* Some people think that shaving encourages more hair growth, but this is not true. However, the stubble that follows regrowth may be undesirable. Frequent shaving can irritate your skin.
- *Waxing* is effective for some people, but can irritate the skin and should be used with caution on the face. Scarring occasionally follows. Folliculitis (inflammation of the hair follicles) can occur with shaving, and waxing.

- *Depilatories* (creams that remove hair) chemically dissolve hair shafts thereby leaving no stubble, but may also irritate your skin. Before using them you should first test your skin to see how sensitive it is. Always follow the manufacturer's instructions for testing and product applications.
- *Bleaching creams* are designed to make the dark hairs pale. They can irritate the skin and may be unsuitable for brown and black skins.

Medical treatments

- *Eflornithine cream*. This cream works by slowing hair growth. It is not a depilatory cream. It has recently been accepted for use in women for whom other medical treatments cannot be used or have been ineffective. It can be applied after any regular hair removal techniques, such as the self-care or physical methods described in the preceding paragraphs. It is left on the skin to inhibit hair growth. The cream takes two to three months of regular use to have an effect. Side effects are usually mild and include burning or stinging of the skin and acne.
- *Anti-androgens*. Your doctor may prescribe these to block the action of the androgens that can cause hirsutism. Anti-androgens usually take 4-6 months to have an effect. Hair growth will then slow, and the hairs will gradually become thinner and less noticeable; the problem, however, tends to return when medication is stopped.

Anti-androgens include:

- *Oral contraceptives*. Some low-dose combined pills may help, and one has been designed specifically to have an anti-androgenic activity. Side effects include spotting (bleeding between periods), tender breasts, nausea and headaches, especially in the first few months. The oral contraceptive pill is not suitable for everyone.
- *Cyproterone*. Combined with an oral contraceptive this can help women with hirsutism. Larger doses of cyproterone (i.e. 50 to 200 mg for 10 days each cycle) can be used for more severe hirsutism. Side effects include weight gain, depression, blood clotting in veins of legs and loss of libido.
- *Spironolactone*. This is used more commonly in the USA than in the UK. It works as an anti-androgen but also increases the amount of urine that is passed - in other words it is also a water tablet (diuretic). Spironolactone (50 to 200 mg daily) can slowly reduce excessive hair growth. Side effects include tender breasts, irregular menstruation and liver damage.
- *Finasteride*. Used at the dose to treat benign prostatic hyperplasia (5mg), rather than male-pattern baldness (1mg). This drug blocks the enzyme that makes testosterone into the active androgen dihydrotestosterone. It appears to be as effective as spironolactone, but is not licensed for treating hirsutism in the UK. Its usage should be restricted to postmenopausal women.

N.B. An important side effect of all anti-androgen drugs is that they can harm an unborn male baby if you take them while you are pregnant. For this reason, they must not be taken unless you are using effective contraception.

Physical treatments

- *Electrolysis.* An electrical current is passed into a hair follicle through a needle. The aim is to destroy the hair root permanently. Electrolysis is relatively expensive and time-consuming. Before you have electrolysis, check that the operator is properly qualified, and registered with the Institute of Electrolysis. Check that the practitioner uses new, disposable (not simply re-sterilised) needles. Equipment designed for electrolysis at home are not recommended. Scarring is a potential side effect of this treatment. It is not always available on the NHS.
- *Laser and intense pulsed light (IPL) treatments* also aim to destroy the hair root permanently. They are not always available on the NHS. Laser treatment and IPL are expensive and several treatments are given over a period of months. This form of hair reduction must be done at a special clinic by an operator who is properly qualified. Check that they are registered with the Healthcare Commission or

British Medical Laser Association. It is better to take the route of a referral from your medical practitioner to a specialist. Possible side effects include redness, darkening or lightening of the skin, and scarring. Total compliance during the treatment plan is required; this will include no sun bathing (or fake tanning) and cessation of all forms of hair removal, with the exception of shaving.

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5. LEVEL N/A: NICE CKS
NICE CKS: Hirsutism

How should I assess the severity of hirsutism?

- Assess the severity of hair growth and the impact on the woman's quality of life, as this may guide treatment.
- Some hair growth in the androgen-dependent areas is normal, and there is no clear cut-off for defining excessive hair growth.
    - A subjective approach is generally appropriate in primary care, using the woman's own perception of her condition and the extent it impacts on her quality of life.
    - Hirsutism can be more formally evaluated using the Ferriman–Gallwey scoring system; however, this scoring system has several limitations, and is impractical for routine use in clinical practice.

Definition of excessive hair growth

- There is no clear cut-off for defining excessive hair growth. Although many clinical trials use a Ferriman–Gallwey score of eight or more to indicate hirsutism, many women with a lower score consider themselves hirsute.

Management (premenopausal)

For premenopausal women (with or without polycystic ovary syndrome):

- Encourage weight loss in women who are overweight or obese (see the CKS topic on Obesity for more information).
- Discuss cosmetic methods of hair reduction and removal, as these will remain an important part of management.
- If hirsutism is mild and does not significantly impact on the woman's quality of life, consider no additional treatment.
- If additional treatment is required, offer co-cyprindiol (Dianette®) or a combined oral contraceptive (COC) containing drospirenone (for example Yasmin®).
    - Co-cyprindiol (Dianette®; a combination of ethinylestradiol and the anti-androgen cyproterone acetate) is licensed for the treatment of moderately-severe hirsutism but should be stopped three or four menstrual cycles after the woman's hirsutism has completely resolved because of an increased risk of venous thromboembolism.
    - Yasmin® (a combination of ethinylestradiol and drospirenone) is not licensed specifically for hirsutism but is an alternative to co-cyprindiol for women who require long-term treatment. Yasmin® is more expensive than co-cyprindiol.
    - See the CKS topic on Contraception - combined hormonal methods for a full discussion of the risks of COCs.
- Advise the woman that treatment may take at least 6 months to work.
- If relapse occurs when co-cyprindiol is stopped, consider:
    - Intermittent use of co-cyprindiol — stopping treatment after resolution occurs, and starting again if symptoms reappear (licensed use).

- Switching to a COC containing drospirenone (Yasmin®).
- Some experts recommend continuing treatment with co-cyprindiol if the above measures fail.

- If COCs are contraindicated or have not worked, offer women (over 18 years of age) with facial hirsutism topical eflornithine.
  - Benefit should be noticed in 6–8 weeks, and eflornithine should be discontinued if no benefit is seen within 4 months of starting treatment.
  - If improvement is seen, continued treatment is necessary to maintain the benefits. Once the cream is discontinued, hair growth returns to pretreatment levels within about 8 weeks.
  - Eflornithine is contraindicated during pregnancy or breastfeeding and is not licensed in women who are younger than 18 years of age.

Methods of hair removal

- Cosmetic treatment is not usually available on the NHS.
- Cosmetic procedures can be applied in a domestic setting.
  - Shaving does not increase the rate of hair growth or thicken hair, contrary to popular belief. It is a useful technique and yields instant results. However, it does leave stubble that is unpleasant, unsightly, and sharp, and may irritate the skin.
  - Waxing and plucking are effective, but can be painful and may cause scarring, folliculitis, and hyperpigmentation. These techniques can also lead to resistance to electrolysis.
  - Bleaching can improve the appearance of dark hair in the short term, but may also lead to skin irritation.
  - Skin irritation is problematic as it is itchy, unsightly, and paradoxically can lead to increased hair growth.
- Cosmetic procedures carried out in specialist clinics tend to have a longer effect, although they are not usually permanent.
  - Electrolysis uses a localized electric charge to destroy hair cells at the bulb. It is effective, but is time-consuming, painful, and may leave scars or pigmentation changes.
  - Lasers are used selectively in the process of photothermolysis, a more recent technique that generally yields better results than electrolysis. It only affects hair in the growing phase, so must be repeated over several months. Laser hair removal is most effective in women with pale skin and dark hair.

When should I refer a woman with hirsutism?

- Refer the woman, if:
  - Hair growth is of recent onset and rapid progression, there are signs of virilization, hirsutism is particularly severe, or an abdominal or pelvic mass is detected.
  - There are clinical features suggestive of Cushing's syndrome (such as weight gain in the face [moon face], neck region, upper back, and torso; stretch marks; easy bruising; proximal muscle weakness).
  - Serum total testosterone concentration is more than 5 nanomol/L.
  - Hair growth worsens despite treatment.
  - Treatment has not been effective after 6–12 months.

When treatment in primary care has been ineffective

- Hirsutism that has failed to respond to treatment in primary care may respond to systemic treatments such as anti-androgens, insulin-sensitizing drugs, and gonadotrophin-releasing hormone agonists
- Because these drugs are not licensed for the treatment of hirsutism and have potentially serious adverse effects, CKS recommends that they should only be used under specialist supervision.

Treatment in secondary care

- Systemic treatments that may be used in secondary care include:
  - Anti-androgens (such as high-dose cyproterone acetate, spironolactone, and flutamide).
  - 5-alpha-reductase inhibitors (such as finasteride).
  - Insulin-sensitizing drugs (such as metformin and pioglitazone).
  - Gonadotrophin-releasing hormone analogues (such as goserelin and leuprorelin).

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6. LEVEL 3: CASE CONTROL STUDY

Successful treatment of recurrent pilonidal sinus with laser epilation

Landa N, Aller O, Landa-Gundin N, Torrontegui J, Azpiazu JL

Dermatol Surg. 2005 Jun;31(6):726-8

Source: Dermitek Clinic of Laser, Dermatology and Aesthetic Surgery, Bilbao, Basque Country, Spain. dermitek@dermitek.com

ABSTRACT

Background: Pilonidal disease is a chronic disease of the natal cleft. Recurrent follicular infection is the causative factor. Surgical treatment has a significant failure rate, and recurrence is common. Laser removal of hair in the natal cleft could be an alternative to surgery.

Objective: To determine the effectiveness of laser hair removal in the natal cleft on pilonidal disease.

Methods: Six young men with recurrent pilonidal disease were treated with laser epilation in our clinic from 2000 to 2003. Most patients had a history of one or more surgical treatments in the area, and all patients had suffered recurrent folliculitis for years. An alexandrite laser was mostly used, although, occasionally, an intense pulsed light device was used. The number of epilation treatments ranged from 3 to 11, performed at 6- to 8-week intervals.

Results: All patients experienced progressive resolution of the folliculitis with the laser epilation treatments. No more surgical treatments have been needed. The treatments were simple and quick, and there were no complications.

Conclusion: Laser epilation of the natal cleft should be considered a first choice treatment for recurrent pilonidal disease. Preventive laser epilation of the natal cleft in patients with recurrent folliculitis could avoid future surgery.

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7. LEVEL 3: CASE CONTROL STUDY

Effect of hair removal by Nd:YAG laser on the recurrence of pilonidal sinus

Badawy EA, Kanawati MN.

J Eur Acad Dermatol Venereol. 2009 Aug;23(8):883-6. doi: 10.1111/j.1468-3083.2009.03147.x.

Source: Faculty of Medicine, Alexandria University, Egypt. ezzatbadawy@yahoo.com

ABSTRACT

Background: Pilonidal sinus (PNS) is chronic inflammatory process of the skin in the natal cleft. Management of PNS is mainly surgical. Although different types of surgery have been performed, the recurrence rate is still high.

Objective: To evaluate the effectiveness of laser hair removal (LHR) in the natal cleft area on the recurrence rate of PNS as an adjuvant therapy after surgical treatment.

Methods: Twenty five patients with PNS were included in this study. Fifteen patients underwent LHR treatment using Nd:YAG laser after surgical excision of PNS (Patients group) while ten subjects with PNS did not do LHR and served as a control group.

Results: All of the patients were male patients. Their age ranged from 17 to 29 years with a mean of 21.60 +/- 3.13 years. They had Fitzpatrick skin type III, IV and V. The patients have got 3 to 8 sessions of LHR (mean 4.87 +/- 1.64). Follow up period lasted between 12 to 23 months. None of the patients, who underwent LHR, has required further surgical treatment to date. Seven patients out of ten in the control group have developed recurrent PNS. Pain was the most frequent side effect and it was seen in 6 patients (40%).

Conclusion: LHR can prevent the recurrence of PNS. LHR should be advised as an essential adjuvant treatment after surgical excision of PNS. In non-complicated recurrent PNS, LHR is strongly advocated to be started before and continued after doing surgical treatment.

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8. LEVEL 4: CASE SERIES

Evaluation of 60 Patients with Pilonidal Sinus Treated with Laser Epilation after Surgery

Oram Y, Kahraman F, Karincaoğlu Y, Koyuncu E

Dermatol Surg 2010;36:88–91

Background: The surgical treatments for pilonidal sinus disease often result in recurrences, and the patients risk requiring multiple surgical interventions.

Objective: To evaluate the role of alexandrite laser hair removal after surgery in pilonidal sinus disease.

Methods: Sixty patients who underwent surgical treatment of pilonidal sinus disease and were treated with a 755-nm alexandrite laser after surgery between 1999 and 2007 were examined retrospectively. The charts were reviewed, and the patients were interviewed on the telephone about their post-laser period and recurrence. The laser parameters, patient history, and surgical details were recorded.

Conclusion: Our results strongly suggest that laser hair removal after surgical interventions in pilonidal sinus disease decreases the risk of recurrence over the long term.

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9. LEVEL 5: EXPERT OPINION
BMJ Best Practice Guidance: Pilonidal Disease

Treatment Options: Ongoing

Symptomatic: recurrent disease		
Patient Group	**Treatment Line**	**Treatment**
without abscess	1st	repeat surgery
	adjunct	antibiotic therapy
	adjunct	hairremoval • Usually by shaving or laser depilation. • Post-surgical laser hair removal has been shown to decrease recurrence when laser hair removal is used as an adjunct to surgery. http://bestpractice.bmj.com/best-practice/monograph/1146/resources/references.html - ref-9Patients operated on for pilonidal sinus who shave the natal cleft regularly demonstrate a higher risk of recurrence compared with those who do not. http://bestpractice.bmj.com/best-practice/monograph/1146/resources/references.html - ref-8Shaving can, therefore, not be recommended but laser hair depilation may be of some benefit, though further trials are required.
with abscess	1st	repeat surgery
	adjunct	antibiotic therapy
	adjunct	pain relief

10. LEVEL 5: EXPERT OPINION
Patient information leaflet: Laser hair removal
British Association of Aesthetic and Plastic Surgeons (BAAPS)

Laser hair removal: Traditional methods for removing unwanted body hair include shaving, waxing, the application of depilatory cream and electrolysis. Depilation by laser is a relatively new technique. It helps not only those with normal hair growth, but also those with excessive hairiness of the body or face, a condition called hirsutism which causes considerable psychological distress.

Hirsutism affects approximately 10% of women between the ages of 18 and 35. In most cases there is no obvious cause but some patients may have a hormonal disturbance. Hirsutism may also be a feature of the menopause. Unwanted hair is a significant problem for transsexuals and transvestites, and many normal males with hair on their back dislike it intensely. Children with hairy moles of the face or lumbar spine area are often teased.

Hair biology: The hair grows in cycles, alternating between a growing phase (anagen) and a quiescent phase (telogen); catagen is the period of transition between the two.

Cells half way up the hair follicle are thought to be responsible for hair growth. The depilation laser delivers a particular wavelengh of laser light which targets the pigment in the hair. This light penetrates

up to a millimetre beneath the skin where it is absorbed by the pigment in the part of the hair root which is important for growth.

Hairs come in a variety of thicknesses and colours according to the pigment they contain. Black and Laser light penetrates through the skin and is preferentially absorbed by the hair.

The stem cells responsible for hair growth are thought to be located at the attachment of the erector pili muscle to the brown hairs contain most pigment and are easiest to treat. Grey or blonde hair has little pigment and is unlikely to respond to treatment.

Treatment: Treatment may be a little uncomfortable - it feels a little like an elastic band snapping against the skin - but some patients prefer to use local anaesthetic cream to numb the area first. Aloe vera gel may also be used during or after treatment for its cooling effect. Some lasers have a cooling system which reduces the discomfort of the treatment.

After treatment, the treated area may look red and feel warm and tender. This feeling goes after a couple of hours, but in a few patients, particularly those with dark skin, blistering and crusting of the skin sometimes occurs after laser treatment. Some hairs disappear at the treatment session; others, which initially look curled up or "frazzled" may take a few days to fall out.

Types of laser: A variety of laser systems are now available. Ruby lasers, Alexandrite lasers, Nd-YAG lasers and white light machines can all be used to remove hair with varying degrees of success. The size of the area covered by each pulse of laser energy varies with the machine used.

Results: Initial reports of laser hair removal were extremely promising, and some research went so far as to claim that it may be permanent, but this is generally not the case. A few patients do not respond to the laser treatment at all but many will have good results. Regrowth is not only less dense but also less coarse. In the ideal patient, with dark hair and pale skin, the hair usually disappears for two to three months and then slowly regrows. Repeat treatment is usually required several times a year.

Safety: When laser treatment is carried out it is essential that all those within the treatment room, you and the staff, should wear protective goggles or glasses. Entry to the room is strictly controlled whilst treatment is being given.

Complications and problems: Laser light can damage the skins pigment and sometimes the treatment area may become unusually pale or dark several months after treatment. For this reason, it is always wise to carry out a small trial of treatment in an unobtrusive area before proceeding to extensive treatment. The test patch is examined six to eight weeks later for unwanted side effects and to carefully assess success before proceeding to further treatment. Special care is needed when treating patients with black or brown skin. The Nd-YAG laser may be most suitable for dark skins as it causes less skin damage. After treatment you should stay out of the sun as exposure of recently laser treated skin to strong sunshine may increase the risk of pigmentation problems.

The future: At present many patients derive great benefit from laser hair removal, achieving hair free intervals of up to three months. Further research is likely to improve results in the future. Permanency, the gold standard of hair removal, seems to be some way off however.

DISCLAIMER: This document is designed to supply useful information but is not to be regarded as advice specific to any particular case. It does not replace the need for a thorough consultation and all prospective patients should seek the advice of a suitably qualified medical practitioner. The BAAPS accepts no liability for any decision taken by the reader in respect of the treatment they decide to undertake.

11. LEVEL 1: HEALTH TECHNOLOGY ASSESSMENT

CRD (York): Laser hair removal for prevention of pilonidal sinus recurrence
Lansdale: HAYES, Inc.. Healthcare Technology Brief Publication. 2014

Record Status: This is a bibliographic record of a published health technology assessment. No evaluation of the quality of this assessment has been made for the HTA database.

Authors' conclusions: Pilonidal disease is a pathologic condition characterized by at least 1 abnormal pocket (sinus) or cyst located under the skin and filled with hair and skin debris. It is an acquired condition related to the presence of hair in the natal cleft, caused either by a reaction to loose hair that has penetrated and embedded in the skin or a reaction to a rupture of a hair follicle that may occur with stretching of the deep layers of skin or with the hormone-induced changes in hair follicles at puberty. The reaction involves the formation of pits or sinus tracts that may be asymptomatic or may become infected, involve cellulitis, drain blood or pus, emit a foul odor, and/or cause pain, discomfort, embarrassment, and loss of productivity. Malignant transformation is rare but has been reported. Pilonidal disease most commonly occurs in the natal cleft, a dimple-like structure located near the tailbone just above the crease between the buttocks. It affects nearly 70,000 individuals in the United States each year, occurs at an incidence of 26 per 100,000, affects males 2 to 10 times as often as females, usually presents in the late teens or early 20s, and rarely is seen after the age of 45 years. Treatment aims at eradicating the problematic sinus(es), healing the overlying skin, and preventing recurrence. Mild cases may be treated with antibiotics, careful hygiene, and shaving of the affected area. More severe cases are treated with any of several surgical techniques, such as incision with open drainage and excision with the surgical wound left open to heal, closed in the standard fashion, or closed by a flap construction procedure. While surgery is a successful treatment approach, postoperative recurrence is common, occurring at a rate of 10% to 50%. Because recurrence is thought to be caused by persistent hair growth near the surgical site, efforts to reduce recurrence have focused on hair removal strategies, including electrolysis, shaving, and depilatory creams. Electrolysis is timeconsuming, expensive, and painful; and shaving and applying depilatory creams in the intergluteal area are cumbersome and may require assistance. Thus, these strategies lead to poor compliance and consequent recurrence.

Appendix 2 – Diagnostic and Procedure Codes

(All codes have been verified by Mersey Internal Audit's Clinical Coding Academy)

GM014 – Electrolysis and Laser Hair Removal for Hirsutism	
Electrolysis of hair	S60.6
With the following ICD-10 diagnosis code(s):	
Pilonidal cyst with abscess	L05.0
Pilonidal cyst without abscess	L05.9
Hirsutism	L68.0
Exceptions (ICD-10); the following in a primary or secondary diagnostic position:	
Hirsutism; if related to a graft, plus:	L68.0
Localized hypertrichosis	L68.2
Other hypertrichosis	L68.8
Hypertrichosis, unspecified	L68.9
Other congenital malformations of hair	Q84.2