

Who should look after genital skin disease in the 21st century?

Sethuparvathy Jayakumar, 4th year medical student,

King's College London GKT School of Medical Education

Genital skin disease is a broad and important area within dermatology. It encompasses a wide range of conditions; these can include general conditions that can have genital features, such as psoriasis and eczema, dermatological conditions that typically affect the genitals, such as lichen sclerosus (LS), genital tumours, and dermatological manifestations of other conditions, such as sexually transmitted infections (STIs), or other infections. Consequently, this means that genital dermatological conditions are not just seen by dermatologists, but are also managed within other specialties, such as genito-urinary medicine (GUM) and gynaecology. In the United Kingdom (UK), a patient initially presents to their general practitioner (GP), and hence genital dermatology is also seen in general practice. A GP may then go on to refer a patient with genital skin disease to a GUM clinic, a gynaecologist or a dermatologist, and so care of these conditions is divided. The first multidisciplinary genital dermatology clinic opened in 1960. This was a vulvar clinic with input from both gynaecologists and dermatologists (1). Since then, the incidence of vulvar clinics has been increasing, but they are not widespread throughout the UK currently (2). While each specialty can look after genital skin disease, it is also important to discuss the benefits and challenges associated with multidisciplinary clinics with expert clinicians from all specialties.

Genito-urinary medicine and genital dermatology

GUM clinicians are vital in the treatment of genital skin disease. A GUM specialist manages conditions such as STIs and HIV. Many infections can result in genital skin conditions, such as balanitis, genital herpes caused by herpes simplex virus, and fungal dermatoses. Additionally, HIV can have dermatological manifestations, such as molluscum contagiosum

(3). Consequently, GUM specialists are likely to see a variety of dermatological conditions. A survey of GUM departments in the UK stated that 91% of participants manage genital dermatological conditions within their department (4), which suggests that GUM clinicians already look after genital skin disease in the 21st century. If a patient has a long-term condition with genital features, such as HIV, it may be beneficial for GUM clinicians to look after genital skin disease, for better continuity of care, as opposed to referral to a dermatologist or other specialist. A study of a multidisciplinary vulva clinic showed that more than a third of patients had a genitourinary infection (5). Moreover, under half of the patients had been tested for genital infections by their referring physician. This prevalence of genital infections within this multidisciplinary clinic highlights the need for GUM input within the diagnosis and management of genital skin disease. However, the fact that patients had not been tested for infection prior to referral could suggest that if they had been tested in primary care, they potentially may have been able to be managed by their GP instead.

In the UK, specialist GUM trainees are assessed on genital dermatology, and must be competent in the diagnosis and management of common vulval and penile dermatological conditions, and also be competent in procedures such as punch biopsy (6). This supports the capability of GUM trainees to look after genital skin disease. However, a survey of GUM trainees found that access to genital dermatology training varied throughout the UK, with more exposure reported in London than anywhere else, and that only 21% of the surveyed trainees felt confident in performing a punch biopsy independently (7). Moreover, only 47% of the trainees felt comfortable with the prescription and use of topical steroids, despite the fact that this is the first-line treatment for LS, a common genital skin condition (8). This suggests that genital dermatology training is not consistent across the UK, which should be improved if GUM clinicians continue to manage these patients in the future. This also suggests that GUM clinicians should not be the only specialty involved in care of genital skin

diseases. In contrast, dermatology trainees are likely to be more exposed to punch biopsies and topical steroid use. It is important to note that the British Association for Sexual Health and HIV, an association for healthcare professionals in GUM, have established a Genital Dermatology Special Interest Group, and have recently published guidelines on vulval skin disorders (9), which suggests an increased interest in genital dermatology and will hopefully result in more uniform care (10).

GUM clinicians may also look after genital skin disease due to the circumstances in which genital dermatological conditions present. The most common presenting complaints in vulvar clinics are itch or soreness, and so a GP may be more likely to refer to a GUM clinician. Moreover, it must be noted that in the UK, GUM/sexual health clinics are extremely accessible, and this may also contribute to the prevalence of genital skin conditions within GUM clinics. As there are accessible walk-in GUM clinics, a patient with a genital skin condition can be seen immediately, which may be preferable if they are in pain, or suffering itching or soreness. In contrast, to see a dermatologist you will typically have to be referred through your GP, which may take more time.

Gynaecology and genital dermatology

Gynaecologists also currently treat genital skin disease in the 21st century. Gynaecologists are responsible for managing conditions related to the female reproductive organs. Gynaecologists are expected to be competent in genital skin disorders such as LS, lichen planus and psoriasis (11). However, gynaecology is considered to be a surgical specialty, and this confers some benefit in managing genital skin disease. For example, vulvar intraepithelial neoplasia (VIN) is a genital skin condition that typically requires surgical excision (12). A study of management of these conditions in the UK showed that 92% of gynaecologists saw at least one case of VIN in a year, in comparison to 57% of

dermatologists (13). The paper states that this difference could be due to GPs referring a patient with vulval pruritis to a gynaecologist rather than a dermatologist, but this also could be due to the fact that gynaecologists would be more likely to perform vulval surgery. Moreover, of those dermatologists that saw cases of VIN, 57% of those cases were referred to gynaecologists, and this again is likely to be due to the fact that both dermatologists and gynaecologists consider surgical excision to be the first-line treatment, and this would be performed by gynaecologists. Therefore gynaecologists certainly have an important role in the management of genital skin disease.

Interestingly, in the same study, LS, which does not usually require surgical treatment, was shown to be referred equally to both gynaecology and dermatology, but there were some differences in treatment; gynaecologists occasionally used sex steroids in treatment, which is not recommended in the BAD guidelines (8). Another study of the management of LS in the Netherlands supported that it was referred equally to both gynaecologists and dermatologists, and that gynaecologists used sex steroids and occasionally surgical excision in management, whereas dermatologists were most likely to use corticosteroids. The paper showed that a small proportion of cases were treated by both specialties, and had a higher frequency of follow-ups than being treated by one specialty alone; the authors state that this is likely to be due to the fact that cases managed by both specialties may be more severe (14). This supports the concept that a multidisciplinary attitude to the management of genital skin conditions may be more valuable, especially with severe cases. The Royal College of Obstetricians and Gynaecologists have previously supported the use of multidisciplinary clinics in the treatment of vulval skin conditions, with input from dermatologists and GUM specialists, especially if patients with genital skin conditions struggle with symptom control (15). If multidisciplinary management is not possible, they stated there is a need for accessible communication between specialties.

Dermatology and genital skin conditions

Dermatologists are responsible for the treatment of skin disorders, and hence they are paramount in the treatment of genital skin conditions in the 21st century. In the training pathway for dermatology, UK trainees must be knowledgeable of dermatological manifestations of STIs, and are encouraged to attend GUM clinics. Moreover, dermatologists must also be able to diagnose common and rarer vulval and penile disorders, and are encouraged to attend multidisciplinary clinics to attain this (16). This shows that dermatologists are well educated in genital skin disease.

A study of referrals to a vulvar dermatology clinic showed that less than half of referrals came with a provisional diagnosis, and of those that did, 27.5% had the diagnosis changed at the clinic (17). This highlights the need for dermatology input in the diagnosis of genital skin conditions. Interestingly, although LS was diagnosed correctly prior to referral, in many cases the referring clinician had not started treatment. The study noted that in cases of LS referred by gynaecologists, most of the cases had histological confirmation and yet the gynaecologists still referred to dermatologists for advice on management. This may highlight that there needs to be a greater drive for education in the management of vulval diseases amongst other specialties, particularly those who commonly refer to dermatology such as gynaecologists and GPs. It could also be reflective of the fact that dermatologists are more comfortable prescribing high dose topical steroids, and this could be something to improve in order to improve the treatment of LS and other genital skin conditions. However, this study also supported the use of multidisciplinary input, noting that the dermatology clinic ran at the same time as a gynaecology clinic to maximise communication between the specialties if required.

A study of a genital dermatology clinic led by a consultant dermatologist within a sexual health department showed that the majority of referrals were from a general GUM specialist, and that only 36% of the diagnoses made by the referring clinicians matched those of the consultant dermatologist (18). This suggests that there is value in dermatological input to genital dermatological conditions. The study also showed that the consultant dermatologist was more familiar with using stronger steroids, compared to referring clinicians. This corroborates with previously discussed studies that suggest that dermatologists are more comfortable using topical steroids to treat genital skin conditions.

The role of general practice and other specialties

It has been shown that within a 12 month period, 24% of the population present in general practice with a skin condition (19). Some examples of conditions that can present with genital symptoms that are often diagnosed and managed in general practice are lichen planus, molluscum contagiosum and scabies (20); this suggests that GPs are also responsible for looking after genital skin conditions. This is likely to be relevant in the future, as there is a continual drive for a primary care led National Health Service, so this could mean that GPs may take on more responsibility for the management of genital skin disease in the 21st century.

There is also a role for urologists in the care of genital skin diseases, as urologists are responsible for the treatment of conditions affecting the male reproductive organs. For example, male genital LS can often present with urethral involvement (21), which may require surgical treatment by urologists. Additionally, male genital tumours require input from both dermatologists and urologists, amongst other specialties. Multidisciplinary penile clinics have not been studied to the same extent as multidisciplinary vulvar clinics, but this may change in the future.

Psychosexual therapy is also used in the holistic care of genital skin disease in the 21st century. Genital dermatological conditions can have psychological effects and it is vital to recognise this for management. For example, it has been reported that both men and women with LS commonly suffer with dyspareunia (22,23), and counselling should be offered if this affects their quality of life. Similarly, it has been stated that genital psoriasis can have negative psychosexual effects and adversely affect quality of life (24), further highlighting the need for holistic, patient-centred care, particularly in skin conditions.

The value of and challenges associated with multidisciplinary care

It has been highlighted in the previously discussed studies that the varying specialties are generally in favour of multidisciplinary management of genital skin conditions, especially in complex cases. A review comparing multi-specialty penile clinics to GUM penile clinics showed that multi-specialty clinics biopsied less patients than GUM penile clinics (25), suggesting that with multiple inputs from different specialties, a clinical diagnosis could be made confidently without a biopsy. The same review showed that multidisciplinary clinics had a higher correlation between clinical and histological diagnosis than GUM penile clinics, with the highest rate in a multidisciplinary clinic being 97% (26), compared to 71% in a GUM penile clinic (27). This multidisciplinary clinic was led by a dermatologist, a GUM specialist and an urologist. This could suggest that in multidisciplinary clinics, the diagnosis made is more likely to be correct, as there is combined depth of knowledge from multiple specialties. There is significant value in multidisciplinary care of genital skin conditions, as a management plan with input from multiple specialties can enhance patient-centred care.

However, there are some challenges relating to multidisciplinary genital dermatology clinics. There is no uniform pathway for referral of care in genital skin conditions in the UK. This is because patients are referred based on their provisional diagnosis and local services, typically

to either a multidisciplinary clinic, or to see a gynaecologist, GUM clinician, dermatologist or urologist. 42% of surveyed GUM departments in the UK held multidisciplinary genital dermatology clinics in 2009 (4), which shows there is demand for multidisciplinary care of genital skin conditions. However, the same survey showed that there was varying levels of experience in genital dermatology amongst GUM clinicians, and only a small number had a postgraduate qualification in dermatology. This suggests that there needs to be greater uniformity of training in genital dermatology, to improve multidisciplinary care. Additionally it has been stated that there is no clinical coding protocol for genital dermatology services in GUM departments, and that there is consequently no financial remuneration, which deters departments to run specialist services for genital skin conditions (18). This could be a potential area for improvement if genital dermatology multidisciplinary services were to become more widespread.

In conclusion, genital skin conditions often overlap between multiple specialties, including dermatology, gynaecology, GUM, and urology. These specialties have all described the value of working with each other in the management of these conditions, especially in more complicated cases. It is clear that multidisciplinary clinics are incredibly useful in the management of genital skin disease in the 21st century, and this is ideal; however, the widespread availability of these is dependent on funding and resources. Currently there are approximately 80 adult vulvar clinics in the UK, of which 51 are multidisciplinary (28). If multidisciplinary clinics are not possible, it is important to ensure communication between the relevant specialties is accessible. For clinicians in these specialties, it is essential that whilst undergoing training they get adequate exposure to genital skin diseases, and adequate training in practical procedures such as punch biopsies. Similarly, GPs will often be responsible for the long-term follow up of patients with genital skin conditions, and so it is important that GPs are knowledgeable about genital skin diseases.

Word count: 2500 (excluding title and bibliography)

Bibliography

- (1) Heller D, Randolph P, Young A, Tancer M, Fromer D. The cutaneous-vulvar clinic revisited: a 5-year experience of the Columbia Presbyterian Medical Center Cutaneous-Vulvar Service. *Dermatology* 1997;195(1):26-29.
- (2) Nunns D, Mandal D. The chronically symptomatic vulva: prevalence in primary health care. *Genitourin Med* 1996 Oct;72(5):343-344.
- (3) Koopman R, Van Merrienboer F, Vredden S, Dolmans W. Molluscum contagiosum: a marker for advanced HIV infection. *Br J Dermatol* 1992;126(5):528-529.
- (4) Sashidharan PN, Goorney B, Cassell J, Edwards S, Maw R, Kell P. Survey of the management of patients with genital dermatological problems in genitourinary/sexual health clinics in the UK. *Sex Transm Infect* 2011 Aug;87(5):414-2011-050152.
- (5) Sullivan A, Straughair G, Marwood R, Staughton R, Barton S. A multidisciplinary vulva clinic: the role of genito- urinary medicine. *Journal of the European Academy of Dermatology and Venereology* 1999;13(1):36-40.
- (6) Joint Royal Colleges of Physicians Training Board. Specialty Training Curriculum for Genito-urinary Medicine August 2010 (Amendments 2012). 2012; Available at: <http://www.jrcptb.org.uk/sites/default/files/2010%20GUM%20%28amendment%202012%29.pdf>. Accessed January, 2016.

(7) Hartley A, Bates CM, Sashidharan PN. Survey of genitourinary medicine specialist registrars in the United Kingdom regarding genital dermatology training. *Int J STD AIDS* 2015 Sep 21.

(8) Neill S, Lewis F, Tatnall F, Cox N. British Association of Dermatologists' guidelines for the management of lichen sclerosus 2010. *Br J Dermatol* 2010;163(4):672-682.

(9) British Association for Sexual Health and HIV. 2014 National Guideline for the Management of Vulval Conditions. 2014; Available at:

<http://www.bashh.org/documents/UK%20national%20guideline%20for%20the%20management%20of%20vulval%20conditions%202014.pdf>. Accessed January, 2016.

(10) British Association for Sexual Health and HIV. Genital Dermatology SIG. 2016; Available at:

http://www.bashh.org/BASHH/BASHH_Groups/Special_Interest_Groups/Genital_Dermatology_SIG/BASHH/BASHH_Groups/Special_Interest_Groups/Genital_Dermatology_SIG.aspx?hkey=a11bc887-10c9-445a-a0fa-b98e6f3f4e4f. Accessed January, 2016.

(11) Royal College of Obstetricians and Gynaecologists. 2013 Core Curriculum. Core module 13: Gynaecological Problems. 2013; Available at:

https://www.rcog.org.uk/globalassets/documents/careers-and-training/core-curriculum/2013-05-16_core_module_13.pdf. Accessed January, 2016.

(12) Jones RW, Rowan DM, Stewart AW. Vulvar intraepithelial neoplasia: aspects of the natural history and outcome in 405 women. *Obstet Gynecol* 2005 Dec;106(6):1319-1326.

(13) Tidy JA, Soutter WP, Luesley DM, MacLean AB, Buckley CH, Ridley CM.

Management of lichen sclerosus and intraepithelial neoplasia of the vulva in the UK. *J R Soc Med* 1996 Dec;89(12):699-701.

(14) van der Avoort IA, Tiemes DE, van Rossum MM, van der Vleuten CJ, Massuger LF, de Hullu JA. Lichen sclerosus: treatment and follow-up at the departments of gynaecology and dermatology. *J Low Genit Tract Dis* 2010 Apr;14(2):118-123.

(15) Royal College of Obstetricians and Gynaecologists. Vulval Skin Disorders, Management (Green-top Guideline No. 58) (Archived). 2011; Available at:

https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_58.pdf. Accessed 2016, January.

(16) Joint Royal Colleges of Physicians Training Board. Specialty Training Curriculum for Dermatology August 2010 (Amendment August 2012). 2012; Available at:

<http://www.jrcptb.org.uk/sites/default/files/2010%20Dermatology%20%28amendment%202012%29.pdf>. Accessed January, 2016.

(17) Cheung S, Gach J, Lewis F. A retrospective study of the referral patterns to a vulval clinic: highlighting educational needs in this subspecialty. *Journal of Obstetrics & Gynecology* 2006;26(5):435-437.

(18) Hartley AJ, Hourihan M, Paige D, Williams A. Are specialist-led genital dermatology clinics a valuable and necessary part of sexual health service provision in the UK? *Sex Transm Infect* 2013 Aug;89(5):379-2013-051239.

(19) Royal College of General Practitioners. The RCGP Curriculum: Clinical Modules. 3.21 Care of People with Skin Problems. 2015; Available at:

<http://www.rcgp.org.uk/~media/Files/GP-training-and-exams/Curriculum-2012/RCGP-Curriculum-3-21-Skin-Problems.ashx>. Accessed January, 2016.

(20) Pannell R, Fleming D, Cross K. The incidence of molluscum contagiosum, scabies and lichen planus. *Epidemiol Infect* 2005;133(06):985-991.

(21) Kulkarni S, Barbagli G, Kirpekar D, Mirri F, Lazzeri M. Lichen sclerosus of the male genitalia and urethra: surgical options and results in a multicenter international experience with 215 patients. *Eur Urol* 2009;55(4):945-956.

(22) Neill S, Ridley C. Management of anogenital lichen sclerosus. *Clin Exp Dermatol* 2001;26(8):637-643.

(23) Edmonds E, Hunt S, Hawkins D, Dinneen M, Francis N, Bunker C. Clinical parameters in male genital lichen sclerosus: a case series of 329 patients. *Journal of the European Academy of Dermatology and Venereology* 2012;26(6):730-737.

(24) Meeuwis K, De Hullu J, De Jager M, Massuger L, Van De Kerkhof P, Van Rossum M. Genital psoriasis: a questionnaire- based survey on a concealed skin disease in the Netherlands. *Journal of the European Academy of Dermatology and Venereology* 2010;24(12):1425-1430.

(25) Pearce J, Fernando I. The value of a multi-specialty service, including genitourinary medicine, dermatology and urology input, in the management of male genital dermatoses. *Int J STD AIDS* 2015 Sep;26(10):716-722.

(26) Mallon E, Ross JS, Hawkins DA, Dinneen M, Francis N, Bunker CB. Biopsy of male genital dermatosis. *Genitourin Med* 1997 Oct;73(5):421.

(27) David N, Tang A. Efficacy and safety of penile biopsy in a GUM clinic setting. Int J STD AIDS 2002 Aug;13(8):573-576.

(28) British Society for the Study of Vulval Disease. Clinical Service in the UK: Clinics in the UK (Adult). 2015; Available at:

<http://emuevents.co.uk/BSSVD/documents/database%20of%20members%20of%20vulval%20service%20edited.pdf>. Accessed January, 2016.