W36: Multidisciplinary approach to management of female pelvic floor fistula

Workshop Chair: Judith Goh, Australia

Start	End	Topic	Speakers
		Psychosocial aspects of fistula care in limited resource setting	Hannah Krause
		The role of continence nurse in fistula management	Kate Sloane
		Fistula surgery: tips and tricks	Andrew Browning
		Investigations for urinary fistula and post-operative urinary incontinence	Judith Goh
		Colorectal perspectives on fistulas	Chris Gillespie
		Q&A: Panel	Judith Goh Kate Sloane Hannah Krause Andrew Browning Chris Gillespie

Aims of Workshop

To provide a holistic approach to women with pelvic floor fistula in resource limited settings to include nursing aspect, psychosocial issues including domestic violence and mental health, and surgical management. Fistulas from high resource settings will also be discussed including tips and tricks in diagnosis, prevention and management. Post-fistula urinary incontinence and its management will also be discussed.

Learning Objectives

To highlight psychosocial issues associated with female pelvic floor fistulas, in particular, limited resource areas

Target Audience

Urology, Urogynaecology and Female & Functional Urology, Bowel Dysfunction

Advanced/Basic

Intermediate

Suggested Learning before Workshop Attendance

- Krause H. Pelvic floor dysfunction and Social and Mental health Sequelae Following Childbirth Injury in Women in Eastern and Central Africa (PhD Thesis). https://doi.org/10.25904/1912/3843
- Thayalan K, Parghi S, Krause H, Goh J. Vesicovaginal fistula following pelvic surgery: our experiences and recommendations for diagnosis and prompt referral. Aust NZ J Obstet Gynaecol 2020; 60:449-453. http://dx.doi.org/10.1111/ajo.13134
- Browning A. The circumferential obstetric fistula: characteristics, management and outcomes. BJOG 2007; 114: 1172-1176.
- Goh JTW, Sloane KM, Krause HG, Browning A, Akhter S. Mental health screening in women with genital tract fistulae. BJOG 2005; 112: 1328-30.
- Goh JTW, Browning A, Berhan B, Chang A. Predicting the Risk of Failure of Closure of Obstetric fistula and Residual Urinary Incontinence Using a Classification System. Int Urogynecol J 2008; 19: 1659-1662

Multidisciplinary approach to management of female pelvic floor fistula

Investigations for female pelvic floor fistula and post-fistula urinary incontinence

Prof Judith Goh AO, urogynaecologist,
Griffith University School of Medicine, Gold Coast
Greenslopes Private Hospital, Brisbane, Australia

A female Pelvic Floor Fistula is a fistula affecting the genital tract and/or different vaginal compartments and neighbouring organs such as the urinary tract and/or lower bowel(1).
With obstetric fistulas(OF), history includes type of delivery, duration of labour, time from delivery to leakage, and type of leakage (urine/faeces). For iatrogenic fistulas, history includes date/type of surgery, was injury noted during surgery, was it repaired and time interval from surgery to leakage. A history of previous repairs is important.

Vaginal examination is vital diagnosing pelvic floor fistulas. Assess for:

- External genitalia excoriation/dermatitis
- Vaginal/introital scarring
- Vaginal calibre
- Vaginal urine and/or faeces
- Location of defect/fistula
  - Perineal body intact or deficient?
  - Defect in anterior and/or posterior vaginal wall?

Larger fistulas are usually detected by vaginal examination. An anorectal examination is performed if suspicious of ano-rectal fistula.
A small firm probe such as a lacrimal probe or metal catheter may be used to confirm the fistula.

Bedside/outpatient dye test usually confirms small lower urinary tract/anorectal fistulas. Diluted dye is inserted through a urethral or anorectal catheter (depending on fistula type) and dye test is positive when dye is seen in the vagina following insertion of dye via the catheter.

Imaging is important for the ureteric fistulas. However, imaging is associated with false negative lower urinary tract fistulas(2).

One in 4 women with urinary OF complains of urinary incontinence at discharge from hospital even after closure of the fistula(3). Utilising the Goh classification(4), the risk of urinary incontinence correlated with the location of the fistula, amount of vaginal scarring and the circumferential fistula. Urodynamics in post-fistula women demonstrated 46% with detrusor overactivity and 7% voiding difficulty(5).

Managing post-fistula urinary incontinence relates to presenting complain, clinical findings and investigations. Management of the overactive bladder is conservative. Treatment options of post-fistula stress urinary incontinence include urethral plugs(6), urethral bulking agent(7) and fascial slings with or without urethrolysis and omental flaps(8).

Fistula Surgery: Tips and Tricks

Dr Andrew Browning AM
Founder Barbara May Foundation, Australia
Chair FIGO Expert Advisory Group on Obstetric Fistula

Obstetric fistulae are more commonly caused by an ischaemic insult from a long, unrelieved obstructed labour. The ischemia causes tissue destruction to both the urinary and genital tract and sometimes the alimentary canal as well. Using basic surgical techniques most fistula can be closed successfully, but the patient can be left with ongoing incontinence and an inability to resume sexual relations. This is due to damage and tissue loss to the continence mechanisms of the bladder and tissue loss to vagina itself.

This lecture will discuss more recent surgical developments for the treatment of obstetric fistula that look at reconstructing the continence mechanisms of the bladder and utilising flaps to reconstruct the tissue loss of the vagina. Applications of these methods not only increase the rate of successful fistula closure but also decreases the rate of ongoing incontinence after fistula repair and helps restore sexual relations.

The Role of Continence Nurse in Fistula Management

Ms Kate Sloane
Continence Nurse Advisor
Team Leader St Vincent's Hospital, Melbourne, Australia

Pre and post-operative nursing care is a component of a multidisciplinary approach to female pelvic floor fistula management. Targeted pre-operative and post-operative care and interventions promote a successful outcome and mitigate the risk of surgical failure. Avoiding complications with the urinary catheter in bladder fistula care, and a high-pressure rectum in bowel fistula care are absolutely essential to allow the surgical site to safely heal.

The presentation will focus on care specific to bladder and bowel fistula repair. This includes pre-operative education, post-operative urinary catheter management, and the "Trial of Void", and measures to prevent generating high rectal pressure. The role of conservative interventions will be discussed, involving pelvic floor training, bladder training, defecation dynamics and voiding techniques. Nurses and physiotherapists provide care, and there is also a role for the patient to be aware of measures to avoid complications, and self-monitoring their situation.

Psychological Aspects of Fistula Care in Limited Resource Setting

Dr Hannah Krause AO
Urogynaecologist
Greenslopes Private Hospital, Brisbane, Australia

This presentation discusses social sequelae, rates of mental health dysfunction and risk of domestic violence in women living with obstetric fistula in limited resource settings. Through raising awareness of these issues, it may be possible to promote effective strategies for treatment and prevention.

Krause et al (9) identified that women with obstetric fistula and chronic 4th degree tears experience a high incidence of abandonment and loss of family cohesion. Over 40% of women with obstetric fistula reported being rejected or divorced by their husband secondary to their injury. Women had also sought medical care from health care facilities but did not receive appropriate care or were told there was no treatment possible.

The mental health of women with pelvic floor injuries including obstetric fistula and chronic 4th degree tears were assessed via the GHQ-28 questionnaire (10). More than 95% of these women screened positive, indicating the presumed incidence of major depression to be up to 40%. Identification of women at risk of mental health dysfunction is important, as well as the provision of accessible mental health services.

High rates of domestic violence which occurs globally also impacts women suffering with pelvic floor dysfunction including obstetric fistula and chronic 4th degree tears (11).

It is important to develop education and community awareness of treatment opportunities for fistula and its sequelae, and there needs to be the availability of funding to allow women to access obstetric fistula repair and repair of chronic 4th degree tears at an affordable cost or free of charge. Surgical training must be robust to enable high quality surgery resulting in optimal post-surgical outcomes.

Women suffering pelvic floor fistula in limited resource settings experience significant social displacement, high rates of mental health dysfunction, and are impacted by domestic violence.

Colorectal Perspectives on fistula

Dr Chris Gillespie
Colorectal Surgeon
Clinical Lead Functional Colorectal Services, QEII Hospital, Brisbane Australia

Female pelvic floor fistulae involving the rectum and anus are notoriously difficult to manage and cause much disability. The aim of treatment is to both cure the fistula but also to preserve function and quality of life. Over time there have been a number of operations which have evolved to achieve both of these goals, but it may be the adjuncts to surgery which are important in improving success rates.
This talk aims to summarise the difficulties in the management of female pelvic floor fistulae from a colorectal perspective, including a perspective on what normal function is derived from and what influences outcome in surgery, in particular the development of faecal incontinence or recurrence of the fistula. The use of stomas in surgery, along with dealing with rectovaginal fistulae in inflammatory bowel disease will also be discussed.

References

1. Goh J, Romanzi L, Elneil S, Haylen B et al . An ICS report on the terminology for female pelvic floor fistulas, 2020 Doi: 10.1001/nau.24508.
2. Thayalan K et al. Vesicovaginal fistula following pelvic surgery: our experiences and recommendations for diagnosis and prompt referral. 2020 Doi: 10.1111/ajo.13134
3. Goh JTW, Browning A, et al. Predicting the Risk of Failure of Closure of Obstetric fistula and Residual Urinary Incontinence Using a Classification System. IUGJ 2008; 19: 1659-1662.
4. Goh JTW. A new classification for female genital tract fistula. ANZJOG 2004; 44: 502-4.
5. Goh JT, Krause H et al. Urinary symptoms and urodynamics following obstetric genito-urinary fistula repair. IUGJ 2013: 24; 947-951.
6. Goh JTW, Browning A. Use of urethral plugs for urinary incontinence following fistula repair. ANZJOG 2005; 45: 237-8.
7. Krause HG, Lussy J, Goh JTW. The use of periurethral injections of polyacrylamide hydrogel for treating post-vesicovaginal fistula closure urinary stress incontinence. JOGR 2014; 40: 521.
8. Carey M, Goh J et al. Stress urinary incontinence following delayed primary closure of genitourinary fistula – a technique for surgical management. AJOG 2002; 186: 948-53.
9. Krause HG, Natukunda H, Singasi I, Hicks SSW, Goh JTW. Treatment-seeking behaviour and social status of women with pelvic organ prolapse, 4th degree obstetric tears and obstetric fistula in western Uganda. Int Urogynecol J 2014; 25:1555-1559
10. Krause HG, Hall BA, NG SK, Natukunda H, Singasi I, Goh JTW. Mental health screening in women with severe pelvic organ prolapse, chronic 4th degree obstetric tear and genital tract fistula in western Uganda. Int Urogyecology J 2017; 28: 893-897
11. Krause H, Ng SK, Singasi I, Kabugho E, Natukuna H, Goh J. The incidence of intimate partner violence among Ugandan women with pelvic floor dysfunction. IJGO 2019; 144: 309-313