

# SAUGA NEWSLETTER

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## Message from the Editor

Much has happened in 2016, including SAUGA's hosting of the IUGA meeting in Cape Town, and SAUGA electing a new Head in Urogynaecology, Dr Zeelha Abdool. The new year promises to be just as interesting, with a number of meetings and workshops planned.

Of interest is the annual SAUGA meeting in the second half of 2017, organized by Suran Ramphal in Durban, and another Cape Town meeting, this time in March, hosted by the Royal College of Obstetricians and Gynaecologists. This has an extensive urogynaecological flavor with top class speakers such as Mark Slack, Ranee Thakar, Abdul Sultan, Catherine Matthews and of course our Steve Jeffery. Go to [www.rcog.org.uk](http://www.rcog.org.uk) for details of the meeting and the fantastic workshops.



Peter de Jong

100 South African's attended IUGA—it would be great to get 100 delegates to Cape Town in Summer 2017, and remember the registration fees are greatly reduced! A huge thank you to Steve Jeffery for the work he put into making IUGA 2016 a success.

I wish all readers a happy, peaceful and blessed holiday season, and expect to see you all refreshed in the New Year!!!

## Message from the incoming SAUGA President: Dr Zeelha Abdool

**Dear Colleagues**

It is indeed a great honor and privilege to be elected as president of SAUGA.

Thank you for your trust and confidence! Since my affiliation with SAUGA in 2008, I have witnessed the success and challenges that SAUGA has overcome, through the continuous commitment and motivation by its members and an active SAUGA board. Let me take this opportunity to thank our outgoing president, Dr Stephen Jeffery for his exceptional leadership and dedication to the Society.

My key goal as president will be finalizing the Urogynaecology subspecialty program in potential academic units nationally, and continue to deliver state of the art meetings/workshops to ensure a high clinical standard that is deliverable to all women. I also hope that SAUGA will be defined by shared commitments to professional development and training. Lastly, please do not hesitate to contact me with ideas and suggestions to improve the Society.



**'The secret of getting ahead is getting started' Mark Twain**

## Message from Steve Jeffery: Outgoing President

### Report back on IUGA

As most of our members know, we were privileged to host the IUGA meeting in Cape Town in August of this year. This is the premier Congress in Urogynaecology internationally and was attended by close to 1000 delegates.

One of the highlights was a pre-Congress live surgery workshop. This session included three parallel Theatres. We were able to showcase large number of the world expert pelvic floor surgeons at their best. Some of the well-known names we had at the session included Bob Shull, John Miklos, Rob Moore and Catherine Matthews.

There were also a number of exciting plenary sessions. The delegates particularly enjoyed Linda Cardoso's talk on cosmetic gynaecology. In this session she highlighted the controversies but also showed that there certainly is a place for this in modern gynaecology. We were also pleased to see inclusion of a number of new mini state of the art lectures. Geoff Cundiff gave a particularly enjoyable one where he explained the role of vaginal mesh in modern prolapse surgery.

We were also happy to have our AGM for SAUGA. I want to congratulate Dr Zeelha Abdool for being elected the new chair of the association at this meeting. You will also note that there are a number of new committee members.

I do want to thank every South African who attended this meeting for their support. I know there were a number of challenges regarding the costing of the meeting but thank you for coming despite this. We also express our appreciation to Dr Peter de Jong, the co- chair of the meeting, for all his efforts in making this a successful Congress. We look forward to seeing all our new members at the next SAUGA meeting and also hopefully at IUGA in Vancouver next year.

## ***Diary of upcoming events!!***

<b>December 8, 9</b>	Urogynaecology Workshop Groote Schuur Hospital
Faculty:	Prof J.P Roovers, Dr S Jeffery and Dr Kruger
	Title: Beyond the Basics
To register:	Visit: <a href="https://goo.gl/forms/9JOELRVbvGCKlArtl">https://goo.gl/forms/9JOELRVbvGCKlArtl</a>
<b>December 25</b>	Christmas
<b>December 26</b>	Tweede Krismis
<b>January 1, 2017</b>	New Year
<b>January 2, 2017</b>	Tweede Nuwe Jaar
<b>March 19th, 2017</b>	RCOG / UCT Combined Meeting, Cape Town Details: <a href="http://www.rcog.org.uk">www.rcog.org.uk</a>
<b>August 2017</b>	<b>SAUGA Durban Meeting</b>

## HIV and Pelvic Floor Reconstructive Procedures

Etienne Henn



How would you treat this woman? Would you manage her differently if you knew that she was HIV positive?

There are no guidelines or literature in Urogynaecology on the surgical treatment of HIV-positive women. There is no formal guidance available in South Africa, despite sub-Saharan Africa being the area in the world with the largest burden of this disease. Since 2004 an estimated 25 million people have died from HIV/AIDS and a further 40 million people are living with this condition according to WHO statistics. In South Africa we have an embarrassing history regarding to our management of this condition. Despite initial denial, we have however progressed to national ARV treatment for these patients. A total of 11.2% of the South African population is currently infected with HIV and we know that it is prevalent in approximately 20% of women in their reproductive years. Surgery was traditionally avoided in HIV-infected women due to the fear of post-operative infection. This approach is not generally relevant anymore, due to HIV having transformed from a terminal condition to a chronic inflammatory medical disorder, due to ARV treatment.

We have evaluated the surgical outcomes in HIV-infected women requiring surgical pelvic floor reconstructive procedures in our unit for the past few years. Since 2010 we have followed a non-discriminatory approach in the surgical selection of the women. Standard clinical principles in patient selection for surgery was followed for all women, irrespective of HIV-status. This data was recently presented at the IUGA meeting in Cape Town and I will briefly summarise the findings.

We prospectively evaluated HIV-positive women undergoing pelvic floor procedures and matched them in a ratio of 1:2 to the subsequent two similar surgical procedures in HIV-negative women. We further divided this group into native tissue and mesh augmented repairs. We operated on 1052 women and were able to identify 41 HIV women in the tissue repair group and 24 in the mesh group. The baseline demographics between the 2 groups were similar, except that HIV-positive women in the mesh group were found to be younger. Their median CD-4 count was 380/mm<sup>3</sup> and 88% were on ARV treatment. In the native tissue group we found a longer operating time and hospital stay in the HIV-positive group. There were however no significant differences in peri-operative complications, infections, or surgical outcome between the HIV-positive women and controls in either group. Anatomical success was achieved in the HIV-group in 78% (native tissue) and 95% (mesh) of women. The median follow up period was 18 months.

The clinical evaluations were detailed and included subjective and objective outcomes. We were able to demonstrate that there were thus no significant clinical differences in the surgical outcomes of HIV-positive women compared to their non-infected counterparts.

To answer the question at the beginning of this paper: No, you need not treat her differently based on her HIV status.

## **NEW SAUGA COMMITTEE**

Zeelha Abdool

Paul Swart

Frans van Wijk

Stephen Jeffery

Kendall Brouard

Kobus van Rensburg

Andreas Chrysostomou

Etienne Henn

Thinagrin Naidoo

Tessa Loftus

Suran Ramphal

## Anterior repair with or without a mid-urethral sling in women with a symptomatic cystocele

Andreas Chrysostomou

### Introduction

Anterior vaginal wall prolapse and Stress Urinary Incontinence (SUI) share a common pathophysiologic cause, and often coexist with one another. Although neither condition is life threatening, they are distressing, disabling, and affect up to 50% of parous women. The anterior vaginal wall is the most common site of Pelvic Organ Prolapse (POP). More than 80% off all surgical POP repairs involve the anterior vaginal wall. Traditionally, native tissue anterior repair has been found to be associated with failure rates of 40-60%, which has paved the way for vaginal meshes to emerge over the last 15-20 years. For women with anterior vaginal wall prolapse and SUI, a one-step approach consisting of native tissue anterior repair and midurethral sling (MUS) is recommended, as pre-operative SUI is an important risk factor for post-operative SUI (POSUI). For continent women with symptomatic cystocele, a two-step approach is recommended. This consists of a native tissue anterior repair and incontinence surgery, such as MUS. There is no validating test to detect which women will develop POSUI. The role of MUS during mesh augmented anterior repair is controversial. Small studies have shown that mesh augmented anterior repair is associated with less POSUI as compared to native tissue repair.

### Native tissue repairs for anterior vaginal wall prolapse: To mesh or not to mesh?

Conventional Anterior repair dominated the management of anterior vaginal wall prolapse in the last century. Due to the high rates of recurrence and weakness of the tissue associated with prolapse, a number of synthetic meshes have been introduced in order to improve surgical outcomes. Short-term results have indicated better anatomical outcomes when mesh augmented anterior repair has been performed. Anatomical success rates may be higher, but do not translate into improved functional outcomes when validated questionnaires are used. Mesh augmented anterior repairs are linked to higher rates of surgical complications and postoperative adverse events. When compared to native tissue anterior repair there is no difference in symptom relief or quality of life between the two methods of anterior repair. The mesh erosion has increased from 5% to 19% within three years of follow up and the rates of reoperation have also increased.

## Is there a need for concomitant stress continence surgery during anterior repair?

Women with SUI undergoing anterior repair are recommended to have concomitant continence surgery. Controversy surrounds the role of prophylactic continence surgery for patients with a symptomatic cystocele who do not complain of SUI. A number of well-designed randomised control led trials(RCTs) have indicated that continent women with a symptomatic cystocele can also develop *de novo* SUI following anterior repair. The risk has been found to be highest when occult or masked SUI is present. Occult SUI is urinary leakage that is observed only during a stress test with the prolapse reduced. It is assumed that SUI is masked by urethral kinking or compression by the prolapse. The effectiveness of a prolapse reduction test (PRT) to identify this subgroup of patients who may develop *de novo* SUI after anterior repair is very low: 4-30% depending on the method used to reduce the prolapse. The literature has indicated that only 10-15% of continent women with positive PRT would benefit from incontinence surgery during anterior repair. A meta-analysis by van der Ploeg *al.* showed that while the number of women needed to treat in order to prevent the development of one *de novo*SUI, is nine in all continent women, but only three in continent women with occult SUI. Routine continence surgery during anterior repair is not without complications. Combination surgery is associated with an increase risk of adverse events (such as vaginal perforation, bladder perforation, prolonged catheterization, urinary tract infection).

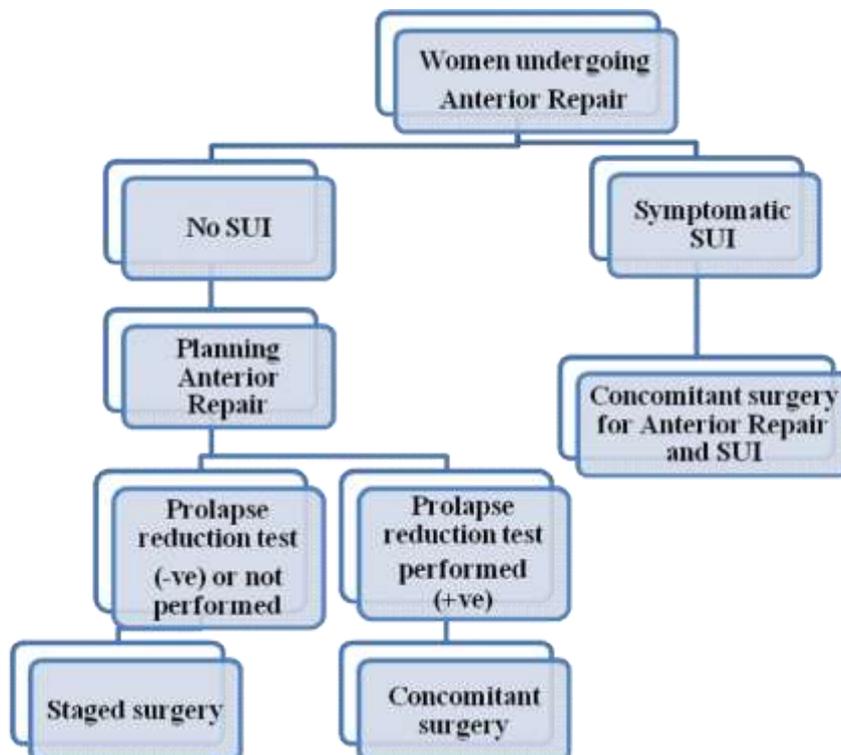
Careful patient selection is important. A prolapse reduction test to identify women with occult SUI could be used as a decision-making tool, in order to determine the need for concomitant continence surgery. An algorithm used by our unit is shown in figure 1.

The unit undertook a retrospective study to evaluate the prevalence of POSUI in continent women who received anterior repair for symptomatic cystocele, and to assess the safety and efficacy of incontinence surgery in women with SUI and symptomatic cystocele, who underwent combination surgery. The study included 120 women that were referred to the Urogynecology clinic during the period of January 2005 to December 2015. These women presented with symptomatic anterior vaginal wall prolapse, stage II and above, with point Ba > +1 cm according to POP-Q classification system. Data collection was completed in March 2016 allowing a 3month follow up period of the last patient who had had anterior repair with or without TOT. Follow up range between 3-120 months (mean 36 months). All women underwent anterior repair with native tissue. Half of the sample (60 women) had SUI and underwent anterior repair and incontinence surgery with Transobturator Tape (TOT) outside-in.

All procedures were successfully performed in one centre, Charlotte Maxeke Johannesburg Academic Hospital (CMJAH), the author. The anterior repair and TOT took longer compared to anterior repair alone (42 min vs 33.5 min;  $P < 0.05$ ). Intraoperative and postoperative complications in both groups were minimal. Success rates of anterior repair defined as Ba < -1 cm were 85% during the follow up period. No PO-SUI were observed in continent women who underwent anterior repair without incontinence surgery. Cure rates of SUI in women who underwent anterior repair and TOT was 96% during the follow up period; a finding that is in agreement with other studies that reported success rates of 90-97%.

In conclusion, the study showed that women with SUI undergoing anterior repair are advised to have concomitant incontinence surgery. For continent women incontinence surgery is not recommended during anterior repair. No significant difference was found between the success rates of anterior repair between women who received TOT and those whom did not receive a TOT incontinence surgery.

**Fig 1: Surgical management of anterior vaginal wall prolapse with or without SUI**



# Prolapse surgery in the era of mesh controversy

**Suran Ramphal**



The prevalence of pelvic floor dysfunction, in particular pelvic organ prolapse, is increasing and this is largely due to improved women's health and the population living longer. Surgery remains the gold standard in the management of prolapse and the aim of surgery is to alleviate symptoms, restore anatomy, avoid complications, maintain sexual function and prevent new symptoms and recurrence of prolapse.

Recently, problems with vaginal mesh in the management of genital tract prolapse has brought the discipline into disrepute. How did we bring ourselves into this situation? The evolution of pelvic floor surgery makes interesting reading. Historically, surgery for prolapse in the early 19th century was fraught with hazards because of the high rate of sepsis and poor materials and instruments. Surgery was in fact the last resort and was performed vaginally with the aim of narrowing the introitus and with no consideration of vaginal function.

In the early 20th century, Howard Kelly introduced the anterior repair for stress urinary incontinence which was then modified for cystocele repair. Two years later, White developed the paravaginal defect repair, which was a site specific repair via the vaginal approach. This was not widely practiced and only reached acceptability in the 1970's.

By the mid 20th century, the standard surgical approach for prolapse was the vaginal hysterectomy, and anterior/ posterior repair. In the late 1950's, apical repair procedures were introduced, viz the sacrospinous fixation and McCall Culdoplasty, and this gave the surgeon choices when addressing prolapse surgery. Complete repairs were possible, but unfortunately this skill was held by a few and selective group of surgeons. The sacrocolpopexy was introduced in the late 20th century, and it was the first surgical intervention to use a graft. The procedure has the advantage of maintaining the vaginal axis, has excellent durability but was only popularized for post hysterectomy apical prolapse. Once again, this procedure was in the hands of a few and not all gynaecologists performed it. Most gynaecologists did a vaginal hysterectomy with anterior/ posterior repair and when prolapse recurred, they were sent to the "specialized" gynaecologists for sacrocolpopexy.

In the late 20th century, the big innovation was the introduction of the TVT for stress urinary incontinence. This was a minimally invasive intervention using a polypropylene mesh, was done as an outpatient procedure, easily taught and was safe and effective. This was the first time a large number of gynaecologists got into contact with mesh surgery.

At the same time, Olsen's paper concluded that there was a " 11% lifetime risk of surgery for pelvic organ prolapse and that 20-30% of all prolapse surgeries will fail. However, nobody evaluated why reconstructive surgery was failing and it was not clear whether it was due to technical failure, wrong procedure or patient characteristics. Furthermore, RCT's for ventral herniorrhaphies performed by surgeons showed a 20% recurrence at 3 years with mesh interposition compared to 54% recurrence with fascia closure. Surgeons were convinced that mesh use for hernia repair was the procedure of choice. This was the catalyst that resulted in the explosion of usage of mesh for prolapse surgery in the early 21st century. This resulted in a dramatic change in surgical strategies for genital prolapse and the materials used varied. However what was forgotten was that the vagina is a pliable structure, is not sterile and has a different function when compared to the anterior abdominal wall.

During 2000-2005, a large number of new mesh kits were introduced. There were few little RCTs and much of the interest was industry driven. Then in 2008, the FDA came with a warning that was reinforced in 2012, that mesh complications are not rare. What was disappointing was that the FDA used the clinicians data to come to their conclusions, yet the clinicians were silent and never voiced their concerns. Recently, second generation kits were introduced with more safety and advocacy data, and now these have also been removed from the market because of litigation fears.

The medicolegal situation around the world with regard to litigation in urogynaecology and pelvic floor reconstruction has deteriorated tremendously. Contributing issues in our discipline that result in litigation is usage of alloplastic and mesh for surgical procedures, urogenital tract injuries with endoscopic surgery, lack of anatomical knowledge and poor surgical skills with pelvic floor surgery, and patients being more critical with management because of increased awareness. In an article in the BMJ, titled "medical error, the 3rd leading cause of death in the US", doctor's mistakes placed 3rd after cardiac disease and cancers. Litigation with mesh usage for pelvic surgery has resulted in large quantum payouts worldwide.

The pendulum has now shifted towards native tissue repair, laparoscopy and sacrocolpopexies if mesh is to be used. Surgery should be tailored to the patient with site specific vaginal repairs and apical repairs when indicated. In an article by Peter Dwyer, "urinary tract injury: medical negligence or unavoidable complication", the laparoscopic approach had a very high incidence of injuries to the urinary tract when compared to other approaches in hysterectomies. There is a steep learning curve to laparoscopic surgical procedures with prolapse, and again this technique is in the hands of few. Changing from vaginal mesh to laparoscopic site specific repairs may be the answer, but this requires dedicated highly trained surgeons with advanced laparoscopic skills. In South Africa, litigation in laparoscopy is of concern, and I am certain that pelvic floor laparoscopic procedures are not widely practiced.

At present, mesh intervention should only be in selected patients by high volume surgeons. That selected group should be failed previous surgery and those at risk for recurrent prolapse. Weak pelvic floor fascia and musculature, and increased intra-abdominal pressure (chronic constipation, pulmonary disease, occupational lifting) are risk factors for genital prolapse. Smoking is not a risk factor for prolapse but is a risk factor for mesh erosion (OR 5.2). Young patients less than 50 years old are at an increased risk for mesh erosion in later years.

Why does recurrence of prolapse occur following pelvic floor surgery? In a study by Blonquist et al, evaluating 7931 women managed surgically for prolapse and undergoing hysterectomy, only 13% had apical support and the authors concluded that surgery was incomplete and could explain the high failure rate. Addressing apical support at the time of hysterectomy is pivotal for surgical success in women with prolapse and there is good evidence that uterosacral suspension and sacrospinous fixation provides good level 1 apical support.

Cochrane reviews are critical and give important information. In a review "Transvaginal mesh or graft compared with native tissue repair for vaginal prolapse", it was shown that mesh has some advantage over native tissue repair. However, many transvaginal meshes were withdrawn from use in 2011. Furthermore, newer lightweight transvaginal meshes became available but were withdrawn before being evaluated in randomized trials because of fear of litigation.

When making choices for prolapse surgery, one has to consider the risk/ benefit ratio for the individualized patient. The benefits are symptom relief and correction of anatomy, the risks are pain, complications, recurrence of prolapse and altered sexual function. With SCP, the benefits are excellent relief of symptoms, durability and increased sexual function.

Risks (although uncommon) include mesh erosion, sacral osteomyelitis and bowel obstruction. However long term data show increasing risk of erosion of up to 10% with long term follow up and increasing failures with time. With native tissue repair using sacrospinous fixation, there is a long term relief of symptoms in 88% and it is less invasive, no risk of erosion and quicker recovery when compared to SCP. Hence one should critically evaluate native tissue repairs and reassess its indication in 2016.. With improved surgical skill, better instruments and sutures and better appreciation of anatomy, there should be limited indications for compensatory repairs for pelvic floor muscle injury and recurrent prolapse. To optimise native tissue repair, one should identify and correct all site specific defects, understand patient expectations and set reasonable goals and encourage lifestyle modification with physiotherapy to all our patients.

It must be remembered that Informed consent is critical. The patient has to know all the relevant facts about the surgical intervention, different methods of intervention, extent of the surgery, post operative recovery performance and what sequelae to be anticipated. Furthermore, they should have knowledge of the success rates of the procedure proposed as well as the alternatives, their success rates and side effects.

To conclude, one should adopt the correct indication and decision making process, know the patients expectations and provide a detailed informed consent, be conversant with the surgical intervention and do procedures with adequate data if not part of multicentre trials.

## CASE REPORT

A 65 year old woman present in my rooms with a bulge at the introitus. No incontinence, no discomfort. Previous TAH 10 years ago. Examination in the erect position showed a cysto-coele easily seen, with a well-supported vault. No SUI with coughing. She was suitable for an anterior repair and perhaps a perineorrhaphy. Then she produced this quote from a colleague.

Procedure code	Qty	Description	Amount quoted
2365	1	Repair of recurrent enterocoele	R12, 983.62
2548	1	Use of tape	R 9, 628.55
2335	1	Vaginal prolapse-sacrospinous fixa-tions	R 4, 670.14
2367	1	Other operations for prolapse	R 2, 252.54
1949	1	Cystoscopy - hospital equipment	R 2, 092.96
		Subtotal	R31, 627.81

What surprised me was not the impressive cost, (reassuringly expensive, as the patient explained). But the list of unnecessary surgery she was advise to have.

