

# JOURNAL OF Endoluminal Endourology

PROCEEDINGS OF THE WELSH  
UROLOGICAL SOCIETY



28th & 29th April 2022  
Hensol, Pontyclun



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**Annual Meeting**  
**Sponsored by the pharmaceutical companies**  
**28th & 29th April 2022**

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This meeting has been sponsored by pharmaceutical companies (listed below) and will be present on the day with exhibition stands.

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## Variations in Presentations, Trends and Outcomes among Urological Emergencies during the 2020 COVID-19 Pandemic

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### Introduction

The COVID-19 pandemic brought in a lot of uncertainties, including concerns regarding seeking important medical treatment. We studied the impact on Urological Emergency Services (UES) in Wales.

### Methods

A prospective study was set up from the initial UK lock down from the 23rd of March 2020 and data was collected over 4 months. Five health boards in Wales collected data on EUS to document changes in care.

### Results

895 patients were included in the study. The mean age was 56.8 (range 1-99) and median age was 61. The male to female ratio was 3.7:1. The commonest Urological emergency was colic (22.3%) followed by retention (16.9%). 29.6% had prior urological history. Among them 10.5% delayed presenting to Urology for fear of COVID-19 but no direct harm was seen as a result. There was no significant association seen between symptom duration and length of stay. Sixty-eight patients were suspected to have COVID-19 on admission, with only 2 testing positive. Due to the impact of COVID-19, only 1.6% of patients had negative changes to standard of care and 1.2% had better care. At the first peak in April 2020, rural centres showed 30-50% drop in daily admission rates compared to pre and post lockdown data. This improved in May and normalised in June.

### Conclusions

Patient admissions significantly dropped during the peak of COVID 19 lockdown, particularly in rural areas, but there was no rebound when it eased. EUS were maintained throughout Wales with no patient harm encountered.

## Reducing Unplanned Admissions

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### Introduction

Percutaneous nephrostomy (PCN) is a commonly used adjunct to relieve ureteric obstruction. PCN care is often poorly administered – leading to unplanned admissions or early replacement. There is often a lack of understanding regarding PCN dressings and management of common problems – many of which can be managed in the community. We sought to improve local PCN care through information, education and a clear pathway for managing potential issues.

### Patients and Methods

We performed a retrospective review of all patients undergoing PCN insertion or replacement from Oct 2019 to Sept 2020. Following service improvements a prospective review was undertaken from Oct 2020 to Aug 2021.

The changes involved implementation of a clear nursing care plan, training package for ward and community nurses and a named clinical nurse specialist contact. This empowered nursing staff to educate patients and provide printed resources & supplies.

We surveyed both community nurses and patients for feedback regarding the new service using online questionnaires.

### Results

256 PCN were inserted into 132 patients. 109 before, 147 after implementation. 41% (77) were first PCN. Mean LOS post insertion was 6.5 days. 75 patients died during the follow up period; median survival 152 days post procedure.

Readmission rates within 90 days fell from 46% to 41%. Expedited PCN reinsertion occurred in 26 patients prior and 15 patients post intervention.

Surveys showed both patients and staff showing increased patient satisfaction and nursing confidence following service changes.

### Conclusion

Readmission rates following PCN insertion can be reduced with simple interventions and a cost effective reproducible service model. There are potential reductions in bed days, readmission rates and preventable early reinsertion. PCN insertion, particularly for malignancy conveys a poor prognosis.

## Penile Necrosis Requiring Total Phallic Reconstruction Following Insertion of Penile Prosthesis

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### Background

The most catastrophic complication of penile implant surgery results in either total/partial loss of the penis or severe fibrosis with loss of penile tissue to such an extent that phalloplasty is

required to regain urinary and sexual function. This series assesses the risk factors involved in this group of patients and their outcomes following reconstruction.

## Methods

All patients following phalloplasty for penile necrosis were identified from a comprehensive prospective database. Potential risk factors for penile necrosis were identified and the type and outcomes of reconstruction summarised. Functional outcomes were assessed by questionnaire.

## Results

Fifteen patients (mean age 53.9 ± 13.9 years) required phalloplasty following penile necrosis (53% by radial forearm free flap) with no flap loss. Reasons for erectile dysfunction were diabetes (40%), Peyronie's disease and pelvic trauma (20% each). All patients had identifiable risk factors - most commonly found was diabetes (60%), followed by smoking (53%), adjunctive procedures like sliding technique or grafting (40%), revision surgery (27%) and infection with delayed explantation (27%). Following phalloplasty, all responders had sensation (and could orgasm if tried) and 86% were able to void standing. The questionnaire response rate was 67%.

## Conclusions

Penile necrosis following IPP insertion is rare and occurs in the presence of risk factors, particularly diabetes and smoking. IPP surgery should be considered carefully in this population of patients especially for revision surgery or where adjunctive procedures are planned. Infection requires immediate explant of the device. Phalloplasty has good surgical and functional outcomes should reconstruction be required.

## Corpora Cavernosa Reconstruction for Penile Prosthetics Surgery using a Lightweight Mesh: A Viable Alternative? A Single Centre Experience

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## Introduction

Options for reconstruction of the corpora cavernosa are limited. Synthetic grafts like Dacron™ and GORE-TEX™ are used but have high infection rates. Lightweight macroporous mesh is a promising alternative due to better integration and surrounding tissue ingrowth. We present the first experience of using a lightweight mesh for this indication.

## Materials and Methods

The medical records of all patients undergoing insertion or revision of penile prosthesis between May 2016 and November 2019 were reviewed retrospectively. Patient characteristics, management and outcomes were extracted.

## Results

Fifteen patients required corpora cavernosa reconstruction during penile prosthesis surgery (median age 56, range 18 to 74 years). Reasons for reconstruction included severe corporal fibrosis (n=7), impending erosion (n=5), congenital corporal agenesis (n=2) and aneurysm of Peyronie's disease plaque grafting (n=1). All but two patients (with corporal agenesis) presented for revision penile prosthesis surgery. Coloplast Titan® OTR inflatable penile prostheses were

used in all patients. Two patients (13%) required explant after a mean follow-up period of 7.4 months ( $\pm 2.6$  SEM). The first experienced erosion of the prosthesis through the distal corpora 6 months after surgery while the other required explant due to debilitating chronic pain after 3 months. There was no other complication (including infection). All patients (who did not require explantation) were satisfied with their penile prosthesis and are currently sexually active.

## Conclusions

Our early results suggest that a lightweight macroporous mesh may be an alternative synthetic graft for corporal reconstruction. The poliglecaprone-25/polypropylene mesh (ULTRAPRO®, Ethicon LLC, USA) is ideal because it is partially absorbable, easy to handle and not bulky.

## Clinical Audit into Reproductive Outcomes after Surgical Sperm Retrieval, Predictive Value of FSH Level In Male Infertility

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## Introduction

Surgical Sperm Retrieval (SSR) techniques combined with Intracytoplasmic Sperm Injection (ICSI) offer men with azoospermia a chance to father biological children. However, the variable success rates of these physically, psychologically, and financially costly procedures highlights the potential value of pre-operative predictors of success. Following a literature review which indicated that Follicle-Stimulating Hormone (FSH) may potentially be used as a pre-operative prognostic factor. An audit of SSR offered by the Wales Fertility Institute (WFI) was conducted, 2014-2021, focusing on pre-operative male FSH as predictive for unsuccessful outcomes.

## Patients and Methods

118 SSR patients were retrospectively identified from theatres and andrology databases. FSH levels together with surgical and subsequent fertility treatment outcomes were audited from physical and electronic notes.

## Results

Using an initial cut-off of 15IU/mL (chosen based on the literature review), analysis demonstrated significantly more patients had unsuccessful SSR and sperm that did not produce healthy deliveries where FSH was  $\geq 15$  IU/mL. ROC analysis generated some alternative cut-offs from the data collected. One potential cut-off for identifying men unlikely to produce sperm capable of producing a healthy delivery following all treatment is 14.0IU/mL (sensitivity 40.8%, specificity 90.5%).

## Conclusions

Though not the only potential prognostic factor of SSR success FSH appears particularly important. Given the goal from SSR is a viable pregnancy and healthy delivery, a potential prognostic cut-off of 14.0IU/mL is a promising candidate above which our model predicts 90.5% of men will not achieve this. It is hoped this helps in counselling men considering SSR as to their likelihoods of success.

## Varicocele Treatment - Outcomes of Ligation and Embolisation in the Treatment of 281 Men with a Clinically Palpable Varicocele

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### Introduction

Treatment options for varicoceles include surgical ligation (SL) and radiological embolisation (RE). RE has the advantages of being performed under LA. The EAU guidelines quote the recurrence rate with RE of 3.8-10%, hence SL is often performed despite the potential for increased morbidity.

### Methods

This was a retrospective study investigating men who had varicocele treatment from 2017-2020. We assessed their pre-and post-treatment SA and ultrasound. The results were analysed using Wilcoxon, Mann-Whitney and t-test.

### Results

281 patients were treated; 168 with RE, 113 with SL. 124 had pre-and post-treatment SA (RE n=78, SL n=46). Both groups showed statistically significant improvement in count; RE 63% (p=<0.001), SL 52% (p=0.009) and Morphology; RE 45% (p=0.003), SL 46% (p=0.005). Neither group showed a statistically significant improvement in Motility; RE 47% (p=0.156), SL 46% (p=0.032). There was no statistically significant difference between the two groups.

83 patients had a pre-and post-treatment US performed (RE n=56; SL n=27). Vein diameter decreased in 68% following RE (3.7±0.86 mm to 3.1±0.80 mm, p<0.0001), 84% following SL (3.91±1.0 mm to 3.1±0.72 mm, p=0.001). Doppler US demonstrated cessation of reflux in 56% treated by RE (n=32) and 52% following SL (n=23).

Technical failure for embolization included 11 single sided failures and 1 bilateral.

### Conclusion

Neither RE and SL are superior for improving semen analysis parameters. Vein diameter decreases significantly after both. RE is a LA, day case procedure versus a GA and groin incision. We would favour the less invasive technique in the light of these findings.



# Assessment of Presence and Metastatic Involvement of Lymph Nodes in Anterior Periprostatic Fat (APPF) in Prostate Cancer Patients Treated with Robotic and Laparoscopic Radical Prostatectomy

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## Introduction

Lymph nodes (LN) in anterior periprostatic fat (APPF) may harbour metastatic disease. We investigated incidence and significance of lymph nodes in APPF tissue removed during robotic and laparoscopic radical prostatectomy.

## Patients and Methods

We retrospectively investigated single surgeon's radical prostatectomies performed from 2013 to 2020. Total 547 patients had undergone radical prostatectomy (RP) either laparoscopic (407) or robotic (140). APPF was sent for histological evaluation in 386 patients to investigate presence of lymph nodes as well as any metastatic involvement.

## Results

Lymph nodes were detected in periprostatic fat of 54 patients (14%) while only 7 of them (1.8%) had lymph node metastasis. All these 7 patients had pre-operative Gleason score of 4+3 or above (ISUP grade group >3), PSA range of 7.1 – 17.83 and Briganti scores ranging from 42 to 82% . Only 2 out of these 7 patients had lymph node metastasis on pelvic lymphadenectomy (Table 1).

## Conclusion

Our series demonstrates that APPF does contain lymph nodes which can harbour metastatic disease. Patients may have involvement of APPF lymph nodes without involvement of pelvic lymph nodes. Therefore, a routine excision of APPF should be performed and for precise lymph node staging, a pathological work up of APPF should be done in all patients at high risk of lymph node involvement based on Briganti score.

TABLE 1: PATIENTS WITH POSITIVE PERIPROSTATIC FAT LYMPH NODES

7 PATIENTS WITH POSITIVE PERI-PROSTATIC LYMPH NODES								
PRE-OPERATIVE						POST-OPERATIVE		
PSA	Prostate Biopsy	PIRAD	STAGE	BRIGANTI	GLEASON	STAGE	SURGICAL MARGINS	MALIGNANT PELVIC LN ON PLND
7.2	7(4+3)	5	T3a	42	7(4+3)	pT3b	Positive	Yes
17.83	7(4+3)	5	T3a	62	7(4+3)	pT3a	Negative	Yes
9.09	7(4+3)	5	T3a	73	7(4+3)	pT3a	Positive	No
13.6	9(4+5)	4	T3a	82	9(4+5)	pT3b	Negative	No
6.9	9(4+5)	5	T3b	75	9(4+5)	pT3b	Positive	No
7.9	9(4+5)	5	T3a	61	7(4+3)	pT3a	Negative	No
7.1	9(4+5)	NA	NA	NA	9(4+5)	pT3b	Negative	No

### LEGENDS

NA = Not applicable as MRI was contra-indicated.



## Urological Implications Associated with the Use of Recreational Drugs: A Narrative Review

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### Introduction

Recreational and illicit drug use remains a widespread issue that affects a broad demographic. About 275 million people worldwide aged between 15-64 years used drugs at least once since 2016. Recreational drug use contributes significantly to mortality as well as physical and mental health problems. A number of urological complications can arise from the use of common and emerging recreational drugs which can present as wide spectrum affecting lower & upper urinary tracts, kidneys, sexual organs as well as sexual dysfunction.

### Patients and Methods

This is a non-systematic critical review of the literature mainly focusing on the use of recreational drugs in urology. Healthcare Databases Advanced Search (HDAS) Export software was used for searching Medline, EMBASE and also searched other databases (inception to March 2021). Only articles in English were used. SQR3 (Survey, Question, Read, Recite, and Review) technique was used for article inclusion.

### Results

Ketamine, Opioids /Heroin, Cocaine, Cannabis, Lysergic Acid Diethylamide (LSD), were found to lead to urological complications. (Table 1 Summary)

### Conclusion

We conclude illicit drug use is widespread and is growing day by day particularly in young. These may have adverse effects on different systems including urological organ system. We strongly recommend a thorough history needs to be elicited particularly if young patients present with LUTS, sexual dysfunction, infertility, or any other atypical presentation. "CHECKS" acronym, standing for cocaine, heroin, ecstasy, cannabis, ketamine and steroids, is a useful tool for situations in which the etiology of a genitourinary illness is not readily obvious.

Table 1

Part Affected	Complication	Illicit drug
Upper tract	Renal cell carcinoma	Amphetamine
	Renal Infarction	Cocaine
	Ureteric Obstruction	Ketamine
	Retroperitoneal fibrosis	Lysergic Acid Diethylamide
	Rhabdomyolysis	Amphetamine
Lower Tract	Bladder Cancer	Cannabis, Heroin
	Prostate cancer	Cannabis
Male Genitalia	Cystitis and LUTS	Ketamine
	Urinary Obstruction	Amphetamine
	Testicular Cancer	Cannabis
	Genital self mutilation	Lysergic Acid Diethylamide
	Testicular self mutilation	Lysergic Acid Diethylamide
	Fournier's Gangrene	Cocaine
	Glans Ischemia	Heroin
Sexual Dysfunction	Erectile dysfunction	Amphetamine, Cannabis, Heroin
	Priapism	Cocaine
	Oligospermia/Infertility	Cannabis, Amphetamine, Heroin
	Testosterone Insufficiency	Heroin
	Sexually transmitted disease	Amphetamine

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# The Advantages of a Protocol-Driven UTI Clinic

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## Introduction

Women with recurrent urinary tract infections (rUTI) are a common referral to urology, yet most investigation and management can be protocol based. To standardise and streamline treatment we established a nurse-led clinic in 2014, which sees increasing rUTI referrals every year. The clinic is overseen by a consultant specialising in Female, Neurological and Urodynamic Urology. This re-audit assesses the investigations requested and the general results of the clinic.

## Patients and methods

We re-audited all patients seen in the clinic between 2017 and 2019 (n=836), looking at per-protocol investigations requested, specifically flexible cystoscopy (n=256) and ultrasonography (n=813). We also assessed the rate of referral to consultant clinics and discharge rate at 6 months.

## Results

The median time from referral to review was 19 weeks. Ultrasound scans identified positive finding in 15% of patients, and cystoscopy in 12.5%. 75% of patients were discharged by 6 months, with 11% of patients requiring urology consultant referral. 2 cancers were diagnosed, typically quicker (less than 3 months) than if they had waited for routine consultant clinics at point of referral.

## Conclusions

A nurse-led protocol driven rUTI clinic provides consistent care to patients and reduces pressure on consultant clinics. With only 11% requiring consultant clinic, this reduces waiting list burden and costs. It also allows for more targeted investigation based on initial assessment to ensure appropriate use of cystoscopy and imaging. This re-audit allowed for evidence-based re-adjustments of our protocol to continually improve the service and reduce unnecessary investigations.



# Factors Causing Variation in WHO Surgical Safety Checklist Effectiveness - A Rapid Scoping Review

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## Introduction

A Rapid Scoping Review (RSR) was conducted to identify factors that prejudice outcomes following implementation of the World Health Organisation Surgical Safety Checklist (WHO SSC). Factors were appropriately grouped and strategies proposed that might enable the SSC to be a more helpful and productive tool in the operating room (OR).

## Methods

This RSR followed the protocol; Preferred Reporting Items for Systematic Review and Meta-analyses extension guidelines for scoping reviews (PRISMA-Scr). Comprehensive searches on Medline and EMBASE were carried out, designed to include all relevant studies published 2015-2020. 27 studies met the review guidelines and were thus included in analysis. The prejudicing barriers to SSC implementation were classified into five main groups, with further sub-divisions in each group. Figure 1.

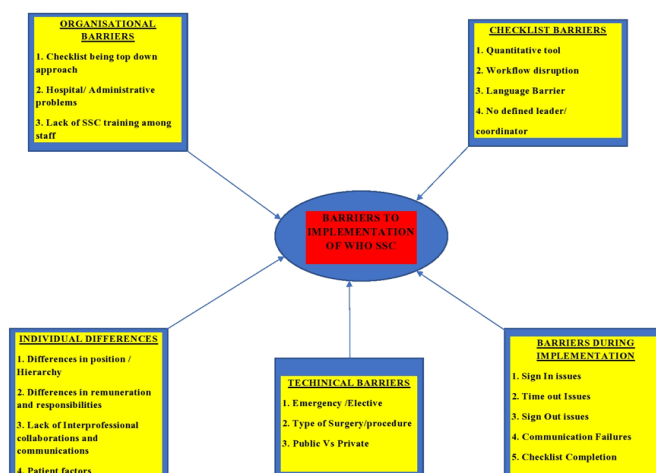
## Results

Results revealed five major prejudicing barriers to SSC at the following levels: organisational, checklist, individual, technical and implementation. On further evaluation, each of these major prejudicing barriers were found to have more than one contributing factor. All factors were analysed individually.

## Conclusion

This RSR has consolidated data which pave the way for medical and administrative personnel to further examine steps that might be taken locally or globally in order to ensure that the intended goals of the WHO SSC are successfully achieved.

Figure 1: Classification of barriers



# PSMA PET/CT in Prostate Cancer (PCa) Management: Outcomes from a High-Volume Tertiary NHS Centre

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## Introduction

PSMA PET-CT (PSMA) is a relatively new development in PCa imaging. We report the role and impact of PSMA in the management of both primary and recurrent PCa since our service's inception in January 2020.

## Methods

A retrospective analysis of PSMA database was conducted. All patients underwent conventional imaging (CI) [CT/MRI & Bone scan] as well. Indications for PSMA were:

1. Primary staging of high-risk PCa
2. Prior to salvage therapy
3. Equivocal findings on CI

Data collected included demographics, PSA, ISUP grade, and TNM staging. Data are expressed as median (range) and analysed using SPSS v25.

## Results

Overall, 454 scans were reviewed; 175 (38.5%) and 279 (61.5%) scans were offered to evaluate primary and recurrent disease, respectively. [table 1]

On reassessment with PSMA, 54.2% of all scans showed nodal or metastatic involvement that led to re-staging. More specifically, 56.5% of primary cases and 77.1% of recurrent cases had their stage, and consequentially, management plan modified. ISUP, cT3 stage, and D'Amico risk classification were not associated with upstaging ( $p > 0.05$ ).

Overall, there was poor agreement between CI and PSMA when evaluating nodal ( $k = 0.216$ ,  $p < 0.005$ ) and metastases ( $k = 0.171$ ,  $p < 0.005$ ) in staging either primary or recurrent disease. A summary of detection rates is outlined in tables 2 and 3.

## Conclusion

PSMA is superior to CI in staging PCa and significantly alters management in these patients.

It should be offered as the first-line of staging imaging for primary (high-risk) and prior to salvage therapy.



**Table 1.** Baseline Characteristics of Patients Offered PSMA after CI (n= 454)

	PSMA for Primary PCa staging	PSMA for recurrent PCa staging
<b>Total number</b>	175	279
<b>Age</b>	68 years (45-84)	69 years (40-85)
<b>PSA</b>	19.4 ng/mL (1.5-619.0)	a. Post-Prostatectomy: 0.8 ng/mL (0.2-51.5) b. Post-Radiotherapy: 4.6 ng/mL (0.3-39.5)
<b>Stage <input type="checkbox"/> T3</b>	80 (86.0%)	184 (65.9%)
<b>ISUP Grade <input type="checkbox"/> 3</b>	139 (79.4%)	149 (53.4%)
<b>D'Amico High risk</b>	171 (97.7%)	233 (83.5%)
<b>D'Amico Int risk</b>	3 (1.7%)	40 (14.3%)
<b>D'Amico Low risk</b>	0 (0.0%)	5 (1.8%)

**Table 2.** A Global Summary of Nodal and Metastatic Disease Detected by CI versus PSMA

	CI	PSMA	P Value
<b>N</b>	61 (13.4%)	198 (43.6%)	p <0.005
<b>M</b>	26 (5.7%)	146 (32.2%)	p <0.005

**Table 3.** Nodal and Metastatic Disease Detection Rate Differences between CI & PSMA in Primary and Recurrent PCa

	Nodal Disease		Metastatic Disease	
	CI	PSMA	CI	PSMA
<b>Primary Disease (n=175)</b>	36 (20.6%)	65 (37.1%)	6 (3.4%)	60 (34.3%)
<b>Recurrent Disease (n=279)</b>	25 (9.0%)	133 (47.7%)	20 (7.2%)	86 (30.8%)

# Management of Suspicious but Non-diagnostic Prostate Biopsies with a Negative MRI in a Tertiary Centre

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## Introduction

In patients investigated for prostate cancer, a proportion of patients have a negative MRI scan and a suspicious but non-diagnostic prostate biopsy. This poses a dilemma of whether a repeat biopsy should be performed. This study aimed to assess the positive biopsy rate, the rate of diagnosis of clinically significant cancer and subsequent management, in patients who underwent a second biopsy.

## Methods

Data on all patients with a suspicious but non-diagnostic prostate biopsy and a negative MRI scan from Dec 2014 to Jan 2020 were collected retrospectively. Clinically significant cancer was defined as Gleason score 4+3 or above (Grade Group  $\geq 3$ ).

## Results

A total of 73 patients were included. The repeat biopsy rate was 56.1% (n=41) for patients with a suspicious but non-diagnostic biopsy. Of these, 13 (31.7%) confirmed prostate cancer, 20 (48.7%) had a negative result and 8 (19.5%) were suspicious but non-diagnostic. Within those with a diagnosis of prostate cancer, 10 (76.9%) were Grade Group 1 while three (23.1%) were Grade Group 2. Only two patients with cancer underwent a prostatectomy while the remaining were on active surveillance. During the follow up period, three further patients developed prostate cancer. These were all either Grade Group 1 and 2.

## Conclusion

Overall, the risk of clinically significant cancer in patients with a negative MRI and a suspicious but non-diagnostic biopsy is very low. All patients that were diagnosed with prostate cancer were Grade Group 1 and 2. This raises the question of whether a surveillance strategy rather than repeat biopsies may be appropriate.



# Long-term Outcomes of Surgical Management of Adult PUJ Obstruction over 10 Years in a Single Institute

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## Aims

To review our data over the last 10 years, compare long term outcomes with the published data on PUJ obstruction.

## Methods and Methodology

We reviewed records of patients from 2012 to 2021, who underwent surgical intervention including laparoscopic pyeloplasty, endopyelotomy or long-term stent exchanges. Success of the procedure was defined as resolution of symptoms, improved drainage and/or stable renal function. Data collected included follow-up from procedure to discharge from planned clinic follow-up, with open access to review as needed. This was then compared to published data under NICE.

## Results

Of 74 patients included, 60 underwent laparoscopic pyeloplasty, 12 endopyelotomy and 2 long-term stent changes. Overall median age of 54.5 years was noted (19-88) with a M:F ratio of 1:1.4. The overall success post-pyeloplasty was 95% over a median follow-up of 19 months (4-92), and that of endopyelotomy was 100% over a median follow-up of 27 months (1-68). Outcomes when compared to non-randomised comparative studies published by NICE were better.

## Conclusions

Pyeloplasty and endopyelotomy are safe and have satisfactory long-term outcome in selected patients. Endopyelotomy seems a suitable option for secondary PUJ obstruction or co-morbid patients not suitable for pyeloplasty. More work is needed to standardise follow up in these

		Lap pyeloplasty			Endopyelotomy	Stent changes	NICE
		Total	Cons 1	Cons 2	Cons 2	Cons 2	Ref 2,3,4
Total number of cases		60	34	26	12	2	436/273/235
Mean age		47	66.5	40	66	83	NA
Male		26	15	11	4	0	NA
Female		34	19	15	8	2	NA
solitary kidney		3	2	1	2	0	NA
Presentation	incidental	11	6	5	0	0	NA
	Pain	41	24	17	6	1	NA
	sepsis	8	4	4	6	1	NA
Pre procedure	Nephrostomy	4	1	4	5	1	NA
	Stent insertion	5	5	0	4	NA	NA
Median Length of stay		3	3	3.5	2	2	NA



Outcomes post procedure	Clinical improvement (1)	51/60 (88%)	28/34 (82%)	23/26 (88%)	12/12 (100%)	2/2 (100%)	PYELO: 82/89/NA EP: 61/60/80
	Stable renal function (2)	59/59 (100%)	34/34 (100%)	24/24 (100%)	8/10 (80%)	NA	
	Improved renal drainage (3)	49/58 (84.5%)	22/32 (69%)	24/26 (92%)	7/8 (87.5%)	NA	
	2/3 of the above	57/60 (95%)	31/34 (97%)	26/26 (100%)	12/12 (100%)		
Median follow up		19 (4-92)	24 (4-65)	46.5 (4-92)	27 (1-68)	NA	42/20/24



# Safety and Efficacy of using Diode LASER in the Management of Upper Urinary Tract TCC: Case Series

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## Aim

To evaluate the efficacy and safety of ureteroscopic diode LASER treatment of upper tract urothelial cancer (UTUC) on a day surgery basis in patients not fit for nephroureterectomy

## Patients and method

A retrospective review of patients who underwent Diode LASER treatment for UTUC over a 4-year period was done. Follow up though 6 monthly ureteroscopy alternating with CT Urogram was done to assess the need for further treatment.

## Results

23 patients were identified, with mean age 74.5 years (61-88) and variable tumour locations including lower and mid ureter and renal pelvis, upper and lower calyces. 85% were ASA 3 and 10% ASA 4. The mean tumour size was 3.8 cm (0.6-7cm). The mean number of sessions was 3.3 (1-6). 65% of the tumours were grade 2, while 22% and 13% were grades 3 and 1 respectively. A case of metastatic RCC was diagnosed as a 4cm filling defect in the kidney where the diode laser was used for both resection biopsy and ablation. 22% experienced Clavien -Dindo grades 1-2 complications. 9% of patients were converted to inpatient stay. None of the patients needed blood transfusion neither did any develop a ureteric stricture on subsequent ureteroscopies. 61% of patients experienced clinical recurrences of which 62% were at a different site. Two of the patients developed metastatic disease. One patient died 3 years after initial treatment with disease progression.

## Conclusion

The management of UTUC with Diode LASER is a safe and efficacious conservative treatment for disease and symptoms control in patients unfit for radical treatment.



# Decision Regret in Patients Opting for Active Surveillance vs Surgical Treatment for Low-Risk Prostate Cancer

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## Introduction

Patients with low risk prostate cancer and life expectancy >10 years are offered active surveillance (deferred treatment) or active treatment with curative intent (radiotherapy or surgery). Previous literature demonstrates that some men regret choosing active treatment due to impaired quality of life from urinary or sexual dysfunction. This is higher following radical prostatectomy compared to radiotherapy(1). This study assessed decision regret in patients following radical prostatectomy compared to those who opt for active surveillance.

## Patients & Methods

Patients undergoing radical prostatectomy or active surveillance from a single health board in 2015-2020 were identified. Patients were defined as low risk if diagnosed with Gleason 6 (3+3) prostate adenocarcinoma on biopsy and had PSA <10 at diagnosis. All identified patients were surveyed using a validated decision regret scale(2).

## Results

101 patients were contacted. The response rate was 57.5% in the surgical group (N=42) and 46.4% in the active surveillance group (N=13). In the surgical group the median regret score was 5/100 (mean 12.9, range 0-75) compared to a median regret score of 25/100 (mean 18.5, range 0-35) in the active surveillance group. Using unpaired T-test there was no statistically significant difference between the groups (p=0.14).

## Conclusion

Overall both groups showed low levels of decision regret. Patients opting for active surveillance had higher decision regret scores than those undergoing surgery but no statistical significance was demonstrated between the groups. Further work should aim to study a larger population to improve the power of this study and may include comparison with radiotherapy patients.

## Can Tamoxifen and a PDE5 Inhibitor Slow the Progression of Peyronie's Disease?

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## Introduction

The available treatments for Peyronie's Disease (PD) as recommended by international guidelines are limited to surgery or intralesional injection therapy. We have shown a combination of a phosphodiesterase type 5 inhibitor (PDE5i) and a selective oestrogen receptor modulator (tamoxifen) inhibited myofibroblast transformation and extracellular matrix production. The aim was to compare tamoxifen and a PDE5i against standard treatment in the progression of early PD.

## Methods

The clinical data was collected retrospectively from patients with early PD over a 3-year period, defined as less than 6 months duration or persistent pain. Patients were given tamoxifen and tadalafil in a private hospital. The control group were patients with early PD receiving standard treatment in non-private hospital. Data retrieved included demographics, duration, change in curvature and pain and further treatment modalities. Curvature was assessed using photos or an artificial erection test. Data were analysed using the Mann-Whitney test.

## Results

A total of 147 patients were included with early PD, 102 patients received tamoxifen and tadalafil and 45 patients received standard treatment. The results are presented in Table 1.

Overall, the patients on combination of tamoxifen and tadalafil showed more improvement and less deterioration which was statistically significant ( $p=0.009$ )

## Conclusion

We have previously shown that the combination of tamoxifen and tadalafil prevented PD *in vitro* and *in vivo*. This is the first clinical study to demonstrate the efficacy of this combination in slowing down the progression of PD. Future prospective randomised and controlled studies are warranted to confirm this finding. **Table 1**

	Combination (tamoxifen + tadalafil)	No treatment or vitamin E	P
n	102	45	
Duration of disease (median)	5 months (1 week -24 months)	6 months (1-12 months)	
Initial curvature (°) median (range)	30 (0-90)	45 (0-100)	0.001
End curvature (°) median (range)	30 (0-90)	45 (15-100)	<0.00001
Improvement (n) (percentage of patients)	28 (27.5%)	5 (10.9%)	0.582
Stabilised (n) (percentage of patients)	62 (60.8%)	28 (60.9%)	0.444
Progressed (n) (percentage of patients)	12 (11.7%)	12 (26.1%)	0.075
Initial pain (n) (percentage of patients)	77 (75.5%)	26 (57.8%)	0.136
Continual pain (n) (percentage of patients)	7 (6.8%)	15 (33.3%)	0.005
Mean follow-up (months)	8.6	24.5	
Number requiring surgery (percentage of patients)	13 (13%)	18 (40%)	0.003
Number requiring intralesional therapy (percentage of patients)	24 (23%)	8 (18%)	0.583

# Morbidity and Mortality in urological emergency patients during Covid19

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## Introduction & Objectives

To assess the outcomes of patients presenting with urological emergencies during the first wave of the COVID-19 pandemic.

## Materials & Methods

A prospective study across 5 health boards in South Wales. All patients admitted as an emergency between 23rd March – 30th June 2020 were included. Parameters included demographics, performance score (PS), COVID status, morbidity and mortality. All patients had COVID status reviewed at 2 weeks post discharge. As per policy, only symptomatic patients were tested for COVID-19

## Results

N=890 patients were admitted as an emergency. 78% were male and cohort mean age was 56.8 years. 49.8% were PS=0.

95% patients received unaltered standard of care. N=130 were tested for COVID on admission, n=9 tested positive. Among new emergencies, 27% had surgical / radiological interventions under anesthesia. Organ loss was noted in scrotal explorations in 4 patients. All were below 25 years of age and delayed presentation due to fear of COVID.

Mortality rate was 3.3% (n=30). N=23 had a PS  $\geq 3$ . N=4 delayed presentation due to fear of covid, these were preventable. No deaths were observed in PS=0 group. The most common cause of death (n=10) was urosepsis.

56% of patients were discharged within a day. At 2 weeks post discharge n=28 had covid tests of which n=1 adult tested positive.

## Conclusions

Mortality among Urology admissions during covid pandemic still was significant but mostly due to underlying Urology conditions. Nosocomial covid infection during admission remain extremely low (0.2%). Emergency Urology service remained safe to deliver during the pandemic.



# Primary Ureteroscopy in Acute Urolithiasis during COVID Pandemic-Quality and Cost Benefits

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## Introduction

To investigate management of acute urolithiasis (AU) during index admission by primary ureteroscopy (P-URS) during COVID 19 pandemic. With the rise in prevalence of urolithiasis, the focus has shifted to manage patients presenting with AU during their first admission rather than using emergency stenting (ES) which are followed by deferred ureteroscopic procedures (D-URS). We compared results of ES with P-URS procedures in terms of quality and cost benefits during COVID 19 pandemic.

## Patients and Methods

In 2019, 82 AU patients underwent ES with no P-URS. In 2020, 72 patients had emergency procedures, 38 had P-URS, 34 had ES. The quality assessment was based in relation to patient factors including- number of procedures per patient, number of days spent at hospital, number of days off work and expertise of person operating. Cost analysis included theatre expenses, hospital stay charges and loss of working days.

## Results

This study revealed that the average stay of patients on index admission who had a ES was 1.35 days compared to 1.78 days in patients who underwent P-URS. Patients who had ES, had to undergo D-URS and spent another average 1.5 days in hospital. Overall, additional expenditure in patients who did not undergo primary URS was on an average in the range of £ 1800(excluding loss of work for patients). Tables 1 and 2.

## Conclusion

We conclude approach of P-URS and management of stones in index admission is very effective in both improving quality of patients (during COVID 19 pandemic ) as well as bringing down cost expenditure effectively.

**Table 1. Quality Comparison**

Average results	ES Group	P-URS Group
Stay during primary procedure (ES)	1.35 days	1.35days (If P-URS not performed)
Stay during primary procedure (P-URS)	N/A	1.78 days
Stay during delayed URS (D-URS)	1.5 days	Not applicable
Max number of days of work loss*	3.85**	2.78***

\*Number of loss of work in study took into consideration days spent at hospital only.

\*\* 1.35 (ES)+1.5(D-URS)+1.0 (Stent removal)=3.85

\*\*\*1.78 (P-URS)+1.0 (Stent removal)=2.78

**Table 2. Cost Comparison**

Average results	ES Group	P-URS Group
<b>Expenditure for ES</b>	£900	£900 <i>(If P-URS not performed)</i>
<b>Expenditure P-URS</b>	N/A	£1,800
<b>Expenditure D-URS</b>	£1,800	N/A
<b>Expenditure for stent removal under local anesthesia</b>	£900	£900
<b>Total expenditure procedures (Maximum)</b>	£3600	£2700
<b>Hospital Charges<sup>#</sup></b>	£1140	£712
<b>Total Cost estimation</b>	<b>£4740</b>	<b>£3412</b>
<b>Patient loss due to loss of work (Approximately)*</b>	£375**	£271***

# Per day hospital charge is approximately £400

\* Number of loss of work in study took into consideration days spent at hospital only.

\*\* 3.85 days x £97.5(per day, average per day UK salary as per office of National Statistics 2019)= £375

\*\*\* 2.78 days x £97.5(per day, average per day UK salary as per office of National Statistics 2019)=£271





# The Surgical Outcome of Buried Penis Surgery

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## Introduction

Buried penis is a condition where the penis retracts. It has a significant impact on quality of life of the patient and can present with a variety of symptom. Whilst there are several causes, obesity is the most common in adults.

## Methods

A retrospective study on patients with buried penis operated on between 2010 and 2020. Data retrieved included presenting complaints, previous surgery, co-morbidities, surgical details and patient and surgeon satisfaction rates.

## Results

A total of 141 patients were recruited with buried penis (median age 54). The presenting complaints were inability to void standing n=30, erectile dysfunction n=18, and small penis n=94. 96 patients had had previous surgery, 49 were circumcisions.

The operations performed on the 141 patients were circumcision (40), scrotoplasty (35), V-Y plasty(11), skin grafting (34), suprapubic fat pad excision(77), abdominoplasty (25), penile prosthesis (14), and division of suspensory ligament (24). The post-operative length of stay was 0-52 days. There were 27 complications; infections (n=15), dehiscence (n=5), haematomas (n=2)

The mean follow up was 506 days (range 0-4313 days) with a surgical satisfaction rate of 87% and patient satisfaction of 79% (p=0.021). Of note the highest dissatisfaction occurred in patients having circumcision and/or suprapubic fat pad removal.

## Conclusion

Buried penis is a complex condition with patients likely requiring a combination of surgical techniques. Circumcision alone usually does not treat the problem and may make things worse. A prolonged hospital stay with significant wound complications may occur but the majority of patients are happy with the final outcome.



# A 10-Year Retrospective Review of Bosniak Cyst Management

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Swansea Bay University Health Board

## Introduction

A retrospective review of Bosniak Cyst (BC) management was conducted to inform and improve current practice.

## Methods

All patients with imaging performed at our Hospital from January 2010 to December 2020 with a report that contained the word 'Bosniak' were reviewed. Simple cysts were excluded.

## Results

Grade 2-4 BC's were reported on imaging in 190 patients, M:F ratio of 1:1.5 with a median age of 70.

There were 112, 53, 20 and 5, Bosniak 2, 2F, 3 and 4 cysts, respectively.

Thirty-four percent of reports for Bosniak 2 cysts recommended follow up, suggesting inappropriate labelling or inappropriate follow up recommendations.

Of those with Bosniak 2 cysts; one patient with a contralateral RCC went onto have cryotherapy after Papillary RCC was found on biopsy. No significant changes were seen in the 51/111 and 30/53 Bosniak 2 and 2F patients on subsequent reimaging.

Of the 20 Bosniak 3 cysts, 6 had nephrectomy of which half were malignant. Of the 5 Bosniak 4 cysts, 3 had nephrectomy and all were malignant. There were 39 deaths overall, of which none were due to renal malignancy. 31% of patients with Bosniak 2F-4 patients were lost to follow up (LTFU).

## Conclusion

BCs are a low-risk disease. Our study reveals potential unnecessary follow up and re-imaging of Bosniak 2&2F cysts. There were no clinically important changes associated 2F BC's and these should be discharged after reimaging with MDT approval at 6 months. Concerns regarding LTFU have been addressed by the creation of a specialist nurse database.

