39th Annual European Association of Urology (EAU) Congress 2024 Conference Review™

Making Education Easy

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In this review:

Abbreviations used in this review:

ADT = androgen deprivation therapy; **AE** = adverse event; **AML** = angiomyolipoma; **BCG** = Bacillus Calmette–Guérin; **ICG** = indocyanine green; **MDM** = multi-disciplinary meeting; **NMIBC** = non–muscle-invasive bladder cancer; **PCBT** = photo coagulation of bladder tumour; **PROM** = patient-reported outcome measure; **PSA** = prostate-specific antigen; **RARP** = robot-assisted radical prostatectomy; **RBS** = rich blood supply; **RFS** = recurrence-free survival; **SRM** = small renal mass; **TNM** = tumour, node, metastasis; **TURBT** = transurethral resection of bladder tumour; **UTI** = urinary tract infection.

Welcome to our review of the 2024 European Association of Urology (EAU) Congress held in Paris, France.

This year's 39th EAU congress was a wonderful opportunity to explore the latest advances in urology research, with a rich 4-day programme that included live surgery, state-of-the-art lectures, case discussions and debates. Here I have selected 13 abstracts which I found particularly noteworthy. We begin with a trial which found PSA doubling time kinetics can be safely used to direct treatment for patients with little or no risk of prostate cancer-specific mortality, indicating many men may be managed with active surveillance. This is followed by an exciting study that showed 54% of both men and women with recurrent UTIs administered the MV140 sublingual bacterial vaccine remained UTI-free for 9 years. Another paper of interest reveals that only 9.3% of patients with renal cell masses showed concordance between CT imaging and pathology, with high rates of downstaging and upstaging – this has implications for the use of stereotactic body radiotherapy, and one wonders whether 3D models will account for these differences in the future, or whether MRI imaging would be more accurate.

I hope you find this conference review of value for your clinical practice and the lives of your patients, and we welcome your feedback.

Kind Regards,

Professor Nathan Lawrentschuk
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Avoiding overtreatment using PSA doubling time kinetics: Long-term management of BCR following RARP

Speaker: Joshua Tran (University of California, USA)

Summary: In most cases, biochemical recurrence of prostate cancer does not lead to prostate cancer mortality. These investigators explored whether PSA doubling time kinetics could be used to direct the treatment of men after robot-assisted radical prostatectomy (RARP) for prostate cancer, with the goal of reducing overtreatment. Between 2002-24, 20.5% of men undergoing RARP (n=287/1400) experienced biochemical recurrence. This analysis excluded men who showed early rapid progression and were proceeded to ADT/radiation. From 8 weeks following surgery, PSA levels were monitored. Men with slowly rising PSAs or non-detectable PSAs (n=105) were actively observed. Among those with biochemical recurrence, 36.6% were managed with active observation. At a median follow-up of 14.6 years (range 9-21 years) 82% of those who received active observation (n=86/105) had successfully avoided ADT/radiation for an average of 11.1 years, and only one active observation patient had died due to prostate cancer (0.9%).

Comment: This study is of particular note with the DIPPER trial just commencing in Australia. This is a multi-centre, randomised trial of salvage radiotherapy versus surveillance for biochemical recurrence after radical prostatectomy (see with free access Roberts MJ et al: The Dedicated Imaging Post-Prostatectomy for Enhanced Radiotherapy outcomes [DIPPER] trial protocol: a multicentre, randomised trial of salvage radiotherapy versus surveillance for low-risk biochemical recurrence after radical prostatectomy. BJU Int. 2024;133 Suppl 3:39-47). The DIPPER trial attempts to ascertain who can be safely watched after biochemical recurrence and who needs treatment. The concept being to prevent unnecessary side effects from salvage radiation and ADT. In the trial summarised here, a much simpler algorithm was implemented - PSA kinetics. Based on their findings, PSA doubling time patterns can be safely used to direct treatment plans for patients with little or no risk of prostate cancer-specific mortality. The investigators concluded that for men around one to two decades post-radical prostatectomy, 37% with biochemical recurrence were managed with active observation with the goal of avoiding salvage ADT/radiotherapy. A remarkable 86 of 105 patients (82%) managed initially with active surveillance have safely avoided ADT ± radiotherapy, and only one of the surveillance candidates (<1%) has died of prostate cancer. Perhaps this should be considered before DIPPER reads out, and please consider recruiting for the DIPPER trial at a site near you!

Abstract A0611

Assessing the long-term efficacy and safety of MV140 sublingual bacterial vaccine in the initial cohort

Speaker: Sagar Kanabar (Royal Berkshire Hospital, UK)

Summary: In two prior studies, promising outcomes have been seen among patients with recurrent UTIs treated with MV140 (Uromune), a polybacterial sublingual vaccine. The vaccine contains inactivated whole bacteria, specifically *Escherichia coli, Klebsiella pneumoniae, Enterococcus faecalis and Proteus vulgaris*. This study examined the long-term safety and efficacy of MV140 among patients from the initial UK cohort. A total of 89 patients (72 women; 17 men) received MV140. Across 9 years of follow-up, 53.9% of all male and female patients remained UTI-free. Overall, patients remained infection-free for 54.7 months (56.7 and 44.3 months for women and men, respectively). Excluding the five patients who died due to unrelated causes, no AEs were reported. There are ongoing studies into the use of MV140 at higher doses, and its use in neurogenic bladders and complex UTIs.

Comment: With how common UTIs are - affecting half of all women and about 20% of men, with 20-30% going on to have recurrent episodes, and with rising antibiotic resistance - it is a massive and expensive problem. This UK study examined the safety and efficacy of the MV140 vaccine in 89 patients. MV140 is a mucosal vaccine of inactivated whole bacteria (*E. coli, K. pneumoniae, E. faecalis, P. vulgaris*). It is administered with two sprays of a pineapple-flavoured suspension under the tongue every day for 3 months. This is quite a remarkable study which in summary revealed that 54% of both men and women with recurrent UTIs remained UTI-free for 9 years after the vaccine, with no notable side effects reported. The full study should be published later this year and hopefully availability and cost will not limit its use in Australia.

Abstract session 55

Can artificial intelligence improve cancer detection in transperineal MRI-TRUS fusion biopsies of the prostate?

Speaker: Karsten Günzel (Vivantes Klinikum Am Urban, Germany)

Summary: This prospective study compared the diagnostic performance of an AI-assisted diagnosis system (Quantib®Prostate) with PI-RADS in the detection of prostate cancer among men undergoing transperineal MRI-transrectal ultrasound fusion biopsy. A median of 10 biopsy cores were taken from each of 262 patients (median age 68 years). The AI software detected a higher number of suspicious lesions than PI-RADS (518 vs. 336). According to PI-RADS 2, 3, 4 and 5, prostate cancer detection rates were 0%, 30%, 76% and 92%, respectively; according to AI analysis, these rates were 36%, 31%, 78% and 92%. Nearly all (98%) of the clinically relevant PI-RADS index lesions were detected by the AI software. AI picked up on 10 (4%) clinically significant prostate cancers which were not reported by PI-RADS, as well as additional prostate-cancer-positive regions of interest in 48 patients (18%). The rate of false positives with the AI software was higher than what was seen with PI-RADS (53% vs. 40%).

Comment: The number of AI articles and papers is set to explode as the now readily-available technology enters many different facets of urology. From diagnosis to prognosis - expect a mountain of papers in the next few years. This study is interesting because it is one that challenges the ability of MRI effectively against radiologists and urologists. Being an early innovation, as one would expect, the AI throws up more lesions than the radiologists. Understandably, this leads to unwanted false-positives - many more than humans would offer up. Yes, the AI did (just) identify some more clinically significant cancers (4%), but this comes at a cost. The reality is, AI will eventually sort out its role - but in the near future it will likely be pointing to missed lesions, or indeed turning PI-RADS 3 into 2 or 4 lesions. This would be much more valuable. The real issue is, we cannot get radiologists to be consistent at different centres to the point where we are comfortable - so how do we train AI to be better? But there is the answer - maybe AI will provide high level consistency by being trained by the 'very best'.

Abstract P035

Outpatient laser coagulation of low-grade intermediate risk bladder tumor compared with TURBT

Speaker: Gyrithe Lynghøj Pedersen (Herlev-Gentofte Hospital, Denmark)

Summary: Earlier data from this randomised Danish study demonstrated that in patients with recurrent Ta low-grade bladder tumours, outpatient photo coagulation of bladder tumour (PCBT) with local anaesthesia was non-inferior to gold standard TURBT with regard to 4-month RFS. This paper reports on 12-month and long-term follow-up data. Among 299 patients (PCBT n=154; TURBT n=146), PCBT was non-inferior to TURBT in terms of 12-month RFS (42.2% vs. 44.1%, respectively), and there was no significant between-group difference in 36-month RFS (26.8% vs. 32.4%; p=0.35). At 60 months, the cumulative incidences of stage progression were 1.0% with PCBT and 0.9% with TURBT.

Comment: Almost every hospital is being squeezed for operating theatre time. Anything that can be performed under local anaesthetic, and in particular in a cystoscopy suite, rather than a main operating theatre is a real opportunity to streamline our health services. However, streamlining practice for expedience should always be backed by data. Certainly, diathermy of small lesions and indeed lasering of suspected or known non-muscle-invasive low-grade tumours, as this paper suggests, is taking place in Australia - but it is not widespread. Importantly, in this study, RFS after outpatient PCBT with laser was non-inferior to traditional TURBT at 12-month follow-up. Yet there are significant barriers: laser training and the overbearing use of laser safety (can we please ditch the holmium laser goggles like they have done in Canada?). However, we should prosecute such mechanisms to hospital administrations to spare patients from unnecessary general or regional anaesthesia, and also free up valuable operative time for cases that actually need doing in such environments.

Abstract A0729

Delineating functional outcomes and patient-reported treatment satisfaction after perineal urethrostomy as last resort management of complex anterior urethral strictures

Speaker: Jakob Klemm (University Medical Centre Hamburg, Germany)

Summary: There is a paucity of data on patient-reported outcome measures (PROMs) following definitive perineal urethrostomy for complex anterior urethral strictures. These investigators carried out a retrospective study on the long-term outcomes of patients undergoing definitive perineal urethrostomy between 2009-23; PROM scores were assessed by via phone, online-based survey and chart review. Among a total of 76 patients, 55% had iatrogenic strictures and 82% had undergone previous urethral interventions. Median stricture length was 3cm, and 37% of patients had a stricture >8cm. Overall, the 2- and 5-year RFS rates were 89% and 83%, respectively. PROM assessments were completed by 54% of patients and in general, these revealed a reduced burden of symptoms following urethrostomy (lower 6-item LUTS & ICIQ-UI SF sum scores) as well as effective symptom management and satisfaction (higher IIEF-EF, MSHQ-Ej & ICIQ-Satisfaction outcome scores). It was noted that baseline discrepancies may account for variation in sexual function outcomes, and that this treatment pathway may be preferred by older patients with comorbid conditions.

Comment: PROMs are used significantly in oncological measures, but are now taking hold in more benign and functional conditions. Perineal urethrostomy appears to have fallen out of favour in the past few decades as urethroplasty techniques advance and such manoeuvres almost became a sign of 'failure of techniques', rather than an obvious solution to complex problems that do not have reasonable solutions. Now we have contemporary data that perineal urethrostomy demonstrates efficacy in addressing complex anterior urethral strictures, results in restored voiding function, continence, and appears to have notable patient satisfaction. Hence, we should not discount perineal urethrostomy as an alternate to sometimes multiple reconstructions. The real question is when to pull the trigger on such an option - maybe well before many failed procedures in difficult circumstances have been done, or simply after a reasonable time - and not then just as a last resort?

Abstract P084

Mismatch between clinical and pathological T stage among patients with suspected renal cell carcinoma undergoing surgery: Potential implications for target volume delineation and stereotactic body radiotherapy (SBRT) implementation for localized renal masses

Speaker: Giulio Francolini (University of Florence, Italy)

Summary: This retrospective analysis evaluated the downstaging/upstaging performance of CT or MRI imaging versus pathological assessment, for patients with a single renal mass suspected of renal cell cancer undergoing nephrectomy. Among 6409 patients across 13 referral centres worldwide, 96.9% (n=6210) underwent pre-operative CT and 3.1% (n=199) underwent pre-operative MRI. On pre-operative imaging, lesion diameters were smaller than 56.8% of histopathology specimens, and larger than 33.9%. Only 9.3% of patients had concordance between imaging and pathology. Patients who received pre-operative CT imaging had a significantly greater median change in diameter than those who underwent MRI imaging (+0.4 vs. -0.1cm; p<0.0001). Overall, patients who received pre-operative CT also had significantly larger histology specimens than had been indicated on imaging.

Comment: CT can get tumour volume wrong? This is interesting as we begin to consider stereotactic radiation to more renal lesions than ever in the past. It also has implications for other ablative procedures. There are further implications for 3D digital renditions and printing, which also assume that CT is the absolute standard. Up until now we have accepted with CT scanning that we get a pretty accurate assessment of a renal tumour size; hence, we then assume the radiation hits the target with a small rim of safety around. This is before we account for breathing. However, this paper challenges the notion that current imaging is accurate, and indeed there is a risk of peripheral underdosage of target lesions, or unnecessary inclusion of normal renal parenchyma inside treatment volume. Intrinsically, we know this to be true as when we do partial nephrectomies, the scan doesn't always match what we find intra-operatively - tumours can be smaller or larger than we imagined. Will 3D models to account for these differences be developed to help in the future? Or as suggested in this paper, would a move to MRI prove more accurate?

Abstract P135

Validation of the PRIMARY system for 68Ga-PSMA-11 PET/CT interpretation for detection of intra-prostatic radiorecurrent prostate cancer

Speaker: Alexander Light (Imperial College London, UK)

Summary: In the primary diagnostic setting, the 5-point PRIMARY score is an effective tool to interpret 68Ga-PSMA-11 PET/CT for patients with a rising PSA after radiotherapy. This single-centre, retrospective study of patients undergoing 68Ga-PSMA-11 PET/CT evaluated the use of the PRIMARY score versus the Likert score in the setting of radiorecurrent prostate cancer. From a total of 35 men, 70 hemi-glands were included in the analysis, 61% of which had cancer. The PRIMARY system showed similar performance to the Likert scoring system. There were no significant differences with regard to the area under the curve (p=0.7), sensitivity (p=0.3) specificity (p=0.1), positive predictive value (p=0.3) or negative predictive value (p=0.1). In both systems, inter-reader agreement was high.

Comment: The 5-point PRIMARY score for the intra-prostatic interpretation of 68Ga-PSMA-11 PET/CT in the primary diagnostic setting of prostate cancer is becoming an important tool in the field. Of course, it was developed in Australia and is among the spectrum of innovations in the uro-nuclear medicine field. However, this score has not been validated after previous radiotherapy for prostate cancer. In this study, the PRIMARY score was reproducible and demonstrated good performance for detecting intra-prostatic recurrences that was comparable to a Likert system. The obvious follow-on is, will a pathway like PRIMARY and biopsy replace the 'Phoenix definition' of radiation failure, which is starting to look like an arbitrary and archaic mechanism for detecting radiation failures. This agenda needs to be openly discussed and provide an opportunity for men with radiorecurrent disease to get appropriate salvage treatments if they are young and fit enough - which is simply not happening enough with ADT being the 'easiest pathway' for too many men.

Abstract P050

Progression rates in prospective series of small renal masses treated with active surveillance according to the newly-proposed cT1a classification

Speaker: Michele Nicolazzini (University Hospital Maggiore della Carità, Italy)

Summary: The EAU Renal Cell Carcinoma (RCC) Guidelines panel have suggested that cT1a small renal masses (SRMs) be reclassified with a cut-off of 3cm. To validate this proposed change, these researchers examined progression rates in active surveillance patients according to the new system. The analysis included 108 patients who received active surveillance for SRMs between 2008-22; 54.6% were classified as new cT1a <2cm (group A; median age at diagnosis 68 years), 26.0% as new cT1a ≥2.0 to ≤3cm (group B; 73.5 years) and 19.4% were upstaged to new cT1b >3cm (group C; 79 years). It was concluded that the findings validate the newly proposed classification system, with cT1b SRMs showing faster growth and greater progression than cT1a masses. At a follow-up of 19 months, progression occurred in 11.9% of masses in group A, 21.4% in group B and 52.4% in group C. In group A, the 3-, 5- and 10-year progression rates rose before stabilising (5.8%, 25.8%, 25.8%, respectively), while rates remained stable in group B (24.5% for all time points) and rose in group C (32.6%, 48.6%, 84.6%). Overall, progression rates were similar between groups A and B (p=0.33), yet significantly slower in group A than group C (p=0.002); median PFS was >120 months in group A and 67 months in group C.

Comment: Traditionally, 4cm has always been the cut-off for SRMs representing features suspicious of being a renal cell carcinoma. However, the new EAU RCC Guidelines panel have proposed a reclassification of cT1a small renal masses, lowering the cut-off to 3cm. The reason being that growth rates appear to become more unpredictable after 3cm than was assumed in the past, and such tumours can be considered to behave less indolently than 4cm tumours. Indeed, this trial has supported both the recent cT1b re-classification and it has also suggested faster growth rates and higher progression rates (almost double that of cT1a small renal masses). They also have emphasised that active surveillance should be mainly reserved for frail and co-morbid patients with limited life expectancy. Will this re-classification of T1a small renal masses be a game-changer and be the new topic of discussion at our next MDMs? One suggestion: move SRMs to the end for only those that really do need discussion, with the rest being tabled, just like for a 1mm core of Gleason 6 cancer - they do not all need a major collaborative decision, but common sense!

Abstract A0467

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Independent commentary by Professor Nathan Lawrentschuk

Nathan has appointments at the University of Melbourne, Department of Surgery as a full Professor and is Director of Urology at the Royal Melbourne Hospital. He is the founding Director of the EJ Whitten Prostate Cancer Research Centre at Epworth Hospital, Melbourne. Nathan is also a consultant uro-oncologist at the Department of Surgical Oncology at Peter MacCallum Cancer Centre. Nathan has written over 500 peer-reviewed full journal article publications and 15 book chapters and reviews for over 30 scientific journals.

Nathan is the BJUI USANZ supplement Editor and is on the editorial board of Nature Reviews Urology. He is also previous Vice-Chairman of WUOF (World Urologic Oncology Foundation) and remains active in many international meetings.

Combined robot-assisted and endoscopic treatment of ureteral strictures

Speaker: M Berra (University Hospital Maggiore della Carità, Italy)

Summary: The feasibility, safety and functional outcomes of robot-assisted treatment for ureteral strictures of benign pathology were assessed in this single-centre experience. A total of 25 patients (median stenosis length 15mm) underwent treatment with the assistance of endoscopy, indocyanine green (ICG) fluorescence and the Firefly tool. Median surgery duration was 200 mins, with a median blood loss of 100mL. Surgeons performed 19 (54.3%) segmental ureteral resections with end-to-end anastomosis, 11 (31.4%) uretero-vesical reimplantations and 5 (14.3%) ureteroplasties with buccal mucosa grafts. The treatment approach was deemed safe and effective. Five patients developed a Clavien-Dindo grade 1 perioperative fever, and one patient experienced grade 3b urinoma which resolved with nephrectomy. Following urinary diversion, overall patient renal function showed an improvement of -10% in creatinine and +12.2% in eGFR; at 3 months these improved further (-5.2% and +12.2%, respectively), before stabilising at 12 months. At long-term follow-up (30 months) one stricture had relapsed, and this was treated with nephrostomy tube. It was noted that to preserve renal function, early urinary diversion is essential.

Comment: Ureteric strictures remain an issue despite improvements in surgical techniques. Traditionally, often challenging re-implantations or even nephron-ureterectomy have dominated the treatment of such strictures. This paper proposes a mixed approach to the treatment of such complications. Pelvic strictures were treated with uretero-vesical reimplantation with or without psoas hitch; conversely, lumbar and iliac strictures with either tension-free end-to-end anastomosis if ≤2 cm, or ureteroplasty with buccal mucosa graft if >2 cm. Importantly, they utilised endoscopy, ICG fluorescence and the Firefly tool - which can be utilised robotically or open (if you have the machine) to maximise blood supply. It appears we need to perhaps consider a multi-modality approach. Also, notably, end-to-end anastomoses for short strictures are back on the table. Finally, of course, to take a logical step further, can we use ICG dye and the Firefly strategically to prevent strictures in the first place?

Abstract P074

SunRISe-3: TAR-200 plus cetrelimab or TAR-200 versus intravesical Bacillus Calmette–Guérin in patients with BCG-naive high-risk non–muscle-invasive bladder cancer

Speaker: James Catto (University of Sheffield, UK)

Summary: The current standard of care for high-risk non-muscle-invasive bladder cancer (NMIBC) is TURBT before intravesical Bacillus Calmette–Guérin (BCG), however BCG has associated toxicities, a substantial proportion of patients do not show a durable response and there are supply shortages worldwide. TAR-200 is a novel, breakthrough targeted therapy in which continuous local gemcitabine is released within bladder tumours via an intravesical drug delivery system. In SunRISe-1, patients with BCG-naïve high-risk NMIBC showed encouraging outcomes with TAR-200 ± cetrelimab. In this session, James Catto presented the design for SunRISe-3, an open-label, multicentre, randomised phase 3 study. The objective of SunRISe-3 is to evaluate the efficacy and safety of TAR-200 + systemic cetrelimab (n≈350) or TAR-200 alone (n≈350), versus BCG (n≈350) in patients with BCG-naïve high-risk NMIBC. SunRISe-3 opened for enrolment in March 2023 in 95 sites across five continents and recruitment is currently ongoing. As of January 2024, 153 patients were in screening and 577 patients had been randomised. The primary endpoint is event-free survival, and secondary endpoints include efficacy, safety and PROMs.

Comment: It appears we should all know about pretzels - not just the famous New York ones. Pretzels are a form of drug-eluding devices that are placed in the bladder cystoscopically and removed the same way; all manner of pharmacologic agents including anticholinergics, chemotherapeutics and immunotherapy agents may be infused within them. TAR-200 is an investigational intravesical drug delivery system designed to provide sustained local release of gemcitabine into the bladder. SunRISe-1 is a trial whereby patients with BCG-naïve high-risk NMIBC received either TAR-200 monotherapy directly into the bladder or intravesical BCG. The results were encouraging with a centrally assessed complete response rate being almost 77% in BCG-naïve high-risk non-muscle invasive urothelial cancer. It appeared to provide a sustained and durable response with 91% of responses ongoing at clinical cut-off, and six patients having a duration of response of ≥12 months. TAR-200 appeared to be well tolerated with very few discontinuations. Also, as an alternative to this treatment, keep your antennae up for the term "*rescue BCG*" that was also featuring at the meeting, which can have durable efficacy in appropriately selected patients with BCG-unresponsive NMIBC (those who have had induction or even induction + maintenance BCG).

Abstract A0595

Asymptomatic bacteriuria prior to partial and radical nephrectomy: To screen or not to screen?

Speaker: Elias Ayoub (Poitiers University Hospital, France)

Summary: The objective of this multicentre, retrospective cohort study from France was to assess the association between asymptomatic bacteriuria screening and risk of post-operative febrile UTI or surgical site infection among patients undergoing partial/radical nephrectomy. Investigators collated data for 269 patients, including additional factors which may increase post-operative infection risk. Following propensity score matching, multivariate analysis and subgroup analysis, there was no significant relationship between urine culture and risk of post-operative UTI (p=0.7)

Comment: The routine urine culturing of asymptomatic patients prior to urological procedures is largely historic, and appears to have been rarely examined or even challenged in the literature. Does it prevent urosepsis and improve patient outcomes? Well, this paper definitively supports the notion that at least for patients undergoing radical or partial nephrectomy, screening and treating for asymptomatic bacteriuria seems to be unnecessary to prevent post-operative UTI and surgical site infection. So, for what other procedures can we cease doing such cultures? Transurethral resection of prostate or bladder tumours? Ureteroscopic extraction of stones? Let's hope more data flow in this area, as such practices of asymptomatic screening are time-consuming, gobble up valuable nursing and medical time, and it appears it may ultimately have no real impact on patient outcomes.

Abstract P104

Revealing patterns in spontaneous hemorrhagic risks and growth of angiomyolipomas: Is strict follow-up warranted?

Speaker: Curtis Lopez (Hospital Ramón y Cajal, Spain)

Summary: Active surveillance is the approach recommended for most angiomyolipomas (AMLs) according to the EAU Clinical Practice Guidelines. This retrospective, single-centre study explored the risks of tumour growth and long-term haemorrhagic complications associated with AMLs. Among a total of 150 patients, the median tumour size at diagnosis was 14mm and 11.3% had a tumour size >4cm. At a follow-up of 64.5 months, 53% of patients had experienced no change in AML size, while nine had undergone surgery (four due to tumour size and five with suspected renal cell cancer), all of which were confirmed as AML. Those with tumour growth had a median change of +0.75mm/year, and 3.8% showed a rate ≥3mm/year. Twelve patients underwent selective angio-embolisation, while six required urgent embolisation due to retroperitoneal bleeding; all six of these patients had AMLs >4cm, while three had rich blood supply (RBS) and two had intralesional aneurysms. Overall, the 5-year risk of a haemorrhagic complication was 4%. Patients were substantially more likely to experience a haemorrhagic complication with the presence of an RBS (OR 11.10; 95% CI 1.68—23.54) and a larger AML (2% increased risk of bleeding for every 1mm increase; OR 1.02; 95% CI 1.01—1.04). Researchers did not identify any predictors for a tumour growth rate ≥3mm/year. To predict haemorrhagic complication, a cut-off of 42mm was proposed (83% sensitivity; 90.2% specificity).

Comment: The follow-up and treatment of AMLs chews up significant time in meetings, not only deciding when to treat, but also in whom and for how long to follow them up. This study has identified again that size matters (the typical 4cm threshold) but also two other interesting elements: 1) RBS defined as an enhanced AML on the arterial phase of CT with at least one visible artery, or 2) those containing intralesional aneurysms ≥5mm. In multivariate analysis, it was calculated that a 2% increased risk of bleeding was apparent for every 1mm increase in size. However, no predictors were identified for a tumour growth rate ≥3mm per year during the follow-up. Certainly, the clinical practice guidelines of the EAU recommend active surveillance, but perhaps we should be tailoring our approach based on RBS and aneurysmal location. Also, in this study, surgery remains a good definitive option even in this series, and one we should consider more often to spare patients years of surveillance and definitively treat without large doses of radiation. The next paper needs to discover why AMLs do not regress with their major blood flow ceased by angio-embolisation.

Abstract P125

Fast track treatment of ureteral stones by short-term preoperative and postoperative stenting (FaST 6)

Speaker: Vincent Hoffman, (Marien Hospital Herne, Germany)

Summary: This randomised, prospective study from Germany compared shorter and longer pre-stenting durations and stent-related symptoms among patients with symptomatic ureteral calculi undergoing ureterorenoscopy. Evaluable patients (n=77) were randomised to either double-J insertion for 2-3 days (fast track; n=37; mean stone size 4.7mm) or 7-19 days (slow track; n=40; mean stone size 5.7mm), before undergoing ureterorenoscopy and temporary urine drainage with mono-J for 6 hours. Both treatment arms experienced similar stent-related symptoms. Repeated double-J placement and postponement of ureterorenoscopy was required in 25.5% of patients in the fast-track cohort, predominantly as a result of insufficient clearance of ureteral stones or an impassable ureter. Fast-track patients had a higher rate of reintervention after mono-J removal than those in the slow-track cohort (4.0% vs. 0%). In addition, a renewed double-J insertion was required for four patients during ureteroscopy, due to extravasation. Researchers concluded that a fast-track approach should be reserved for carefully selected patients, given the high rate of injury and futile ureterorenoscopy.

Comment: The optimal timing of stenting before and after stone treatment has been 'set in stone' for some time. Usually, stents are left in for 2 weeks post-procedure, and if not able to easily or safely get to stones, a similar period has been utilised prior to ureteroscopic stone surgery. This randomised trial attempts to examine tightening both ends. Interestingly, stenting post-procedure was with a single J stent for 6 hours - something not done too often in our neck of the woods. This states the fast-track cohort appeared unsuccessful, with more than 1/4 failing intervention. The slow-track cohort of 7-10 days demonstrated good clearance and no reinterventions. Two obvious lessons: 1) a week of ureteric stenting appears the minimum to allow ureters to dilate and have successful stone extraction, and 2) do we leave stents in post procedure for too long? This last point is interesting and may be related to dusting versus fragmenting with basket extraction, and so on. Certainly, there are a few aspects to mull over, and it is a simple area we could research and solve if we had the resolve to do such a trial!

Abstract session 38