



TMU-Research Center of Urology and Kidney

Monthly Meeting

Times : **2023/12/26(Tuesday) 11:00-12:00**

Google meet link : <https://meet.google.com/dsz-cdre-qsp>

Meeting Chairperson : Kuan-Yu Hung

Participant :

【TMUH】Ming-Che Liu、Yao-Chou Tsai、Shauh-Der Yeh、Chien-Chih Wu、Hsiao-Yu Lin、Jeng-Cheng Wu、Ching-Hsin Chang、Wei-Chieh Chen、Fang-Yu Ku、Shih-Hsiu Lo、Te-Chao Fang、Hsi-Hsien Chen、Yen-Chung Lin、Yueh-Lin Wu、Chih-Chin Kao、Ching-Yi Chen、Shu-Ching Yeh、TING-EN TAI

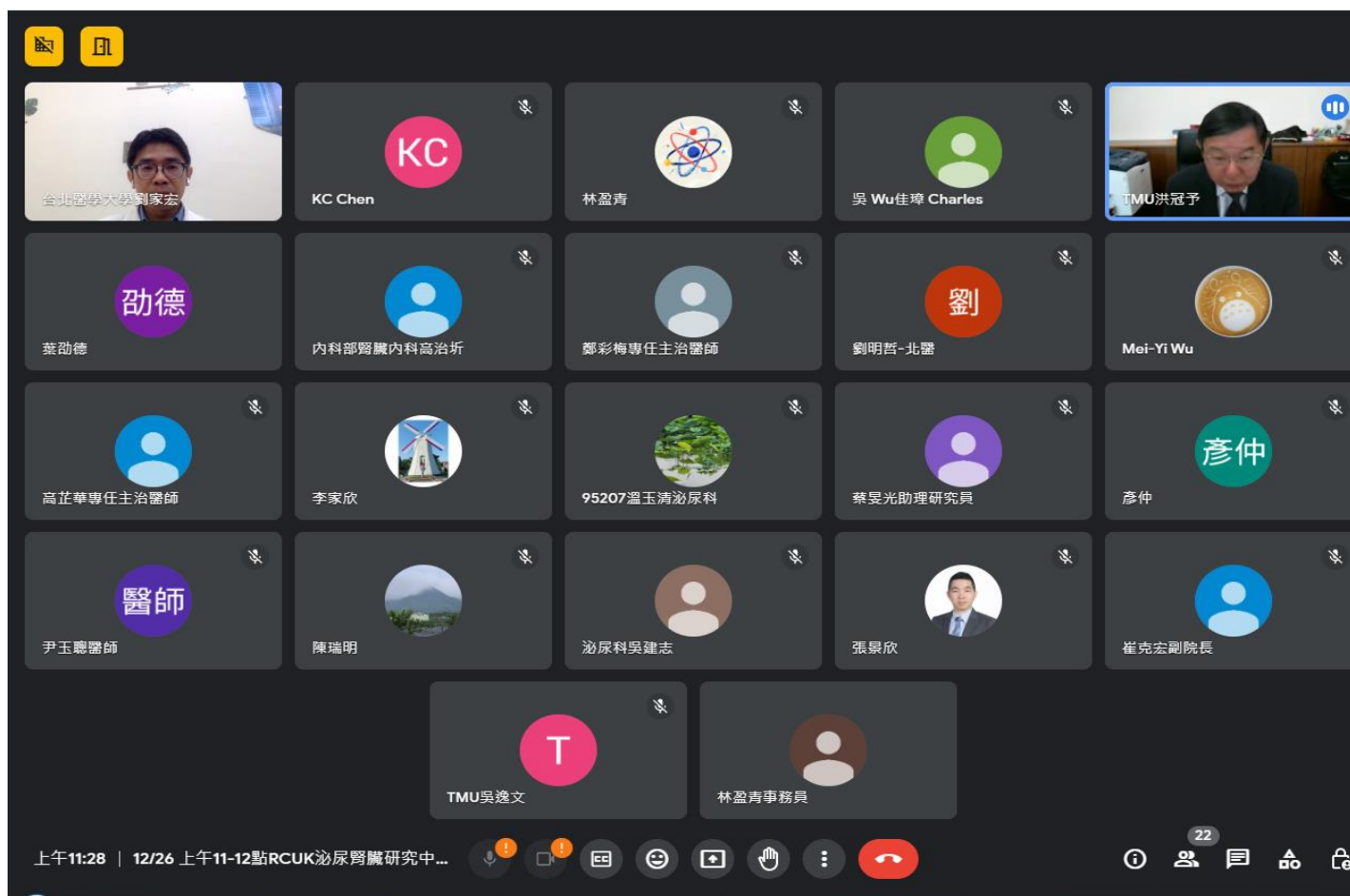
【WFH】Yu-Ching Wen、Liang-Ming Lee、Ke-Hsun Lin、Yung-Wei Lin、Chi-Hao Hsiao、Syuan-Hao Syu、Chung-Howe Lai、Chih-Chen Hsu、Tso-Hsiao Chen、Yuh-Mou Sue、Chung-Yi Cheng、Chung-Te Liu、Yun-Hong Yang、Ming-Che Lee、Cho-Hsing Chung

【SHH】Mai-Szu Wu、Chia-Chang Wu、Chia-Hung Liu、Yi-Te Chiang、Kai-Yi Tzou、Wei-Tang Kao、Su-Wei Hu、Wen-Ling Wu、Mei-Yi Wu、Lie-Yee Hung、Cai-Mei Zheng、I-Jen Chiu、Yu-Wei Chen、Chia-Te Liao、Cheng-Hsien Chen、Hui-Wen Chiu、Po-Han Yu、I-Wen Wu、Tze-Wah Kao、Kuan-Hung Lin

【SKMH】Yung-Ho Hsu、Chu-Lin Chou

Chief : Mai-Szu Wu (President, TMU)、Yen-Hua Huang (Dean, Research and Development, TMU)、Chih-Cheng Hsu (Professor, NHRI)、Ke-Hung Tsui (Vice President, SHH)、Shing-Hwa Lu

Agenda : 1. Urinary and Kidney Cancer Team
2. Kidney Transplant Team



泌尿腎臟癌症團隊

主題: Allium URS(Ureteral Stent)
and experience sharing

報告人：劉家宏 醫師

112.12.26

泌尿腎臟癌症團隊成員



陳冠州



江怡德



溫王清



劉明強



林震偉



劉家宏



江怡德



高偉志



陳汶玲

團隊開會的照片



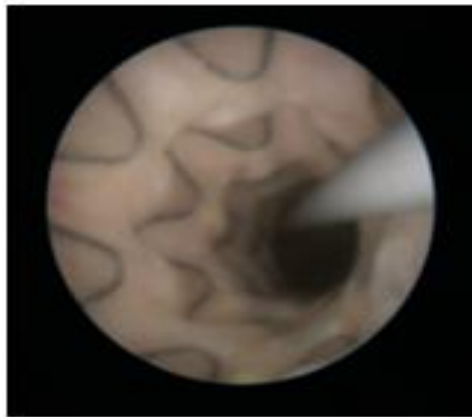
泌尿腎臟癌症團隊

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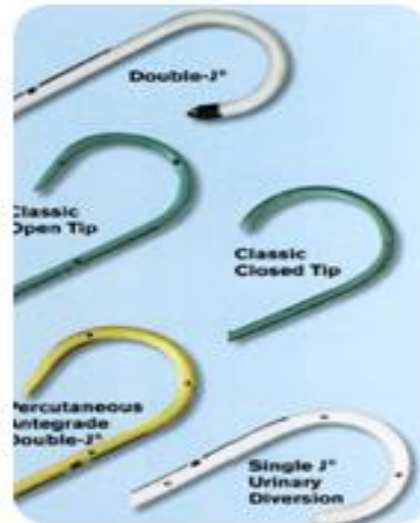
報告人：劉家宏 醫師
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Allium URS(Ureteral Stent) vs. Double J



- Patency
- 24, 27 & 30Fr



Brief at Ureteral Stents:

- Self-expand Metallic Stent with Nitinol
- Full cover with Co-polymer (Elast Eon[®])
- Radiopaque
- Anchor(URS-A & URS-R)
- MIT device

Ureteral Stents(URS)

- Stent with Anchor



- Stent without Anchor



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Elast Eon®

- Biocompatibility & Biostability
- Silicone + Polyurethane
- Reduce stone formation & encrustation
- Long term implanted material- **FDA** approved



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Intended Use

- *Indicated for use in malignant or benign ureteral occlusions necessitating long-term or chronic ureteral stenting*
- *Uretero-intestinal anastomotic strictures*
- *Iatrogenic benign strictures of the ureter*

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Contraindication

- under 18
- Has an active urinary tract infection (increased WBC count, fever, chills etc)
- Has a Hematuria that has not been previously evaluated and treated
- Cannot tolerate any form of antibiotic treatment
- Is receiving any anticoagulation therapy - patients should stop it at least a week before stent insertion
- Has a history of allergy to iodine preparations

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Potential Adverse events

- Pain/discomfort, bleeding, urinary frequency or urgency, stent misplacement or migration, stent obstruction by tissue or stone, infection, sepsis, allergic reaction to the nickel-titanium alloy
- Mild Hematuria is possibly to occur and related to device insertion, particularly during the first few days after insertion

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RELATED STUDIES

JOURNAL OF ENDOUROLOGY
Volume 26, Number 11, November 2012
© Mary Ann Liebert, Inc.
Pp. 1523–1527
DOI: 10.1089/jend.2012.0279

2022-2023 IF:2.619

A New Self-Expanding, Large-Caliber Ureteral Stent: Results of a Multicenter Experience

Boaz Moskovitz, M.D.,* Sarel Halachmi, M.D.,* and Ofer Nativ, M.D.

- The study aim was to evaluate the safety and the efficacy of a new self-expanding, large caliber ureteral stent (Allium).

RELATED STUDIES



THE JOURNAL
of UROLOGY

2022-2023 IF:7.641

New Technology and Techniques

Efficacy and Safety of Complete Intraureteral Stent Placement versus Conventional Stent Placement in Relieving Ureteral Stent Related Symptoms: A Randomized, Prospective, Single Blind, Multicenter Clinical Trial

Takashi Yoshida,* Takaaki Inoue, Makoto Taguchi, Tomoaki Matsuzaki, Takashi Murota, Hidefumi Kinoshita and Tadashi Matsuda

- The study compared the efficacy and safety of complete and conventional stent placement to relieve ureteral stent related symptoms.

RELATED STUDIES

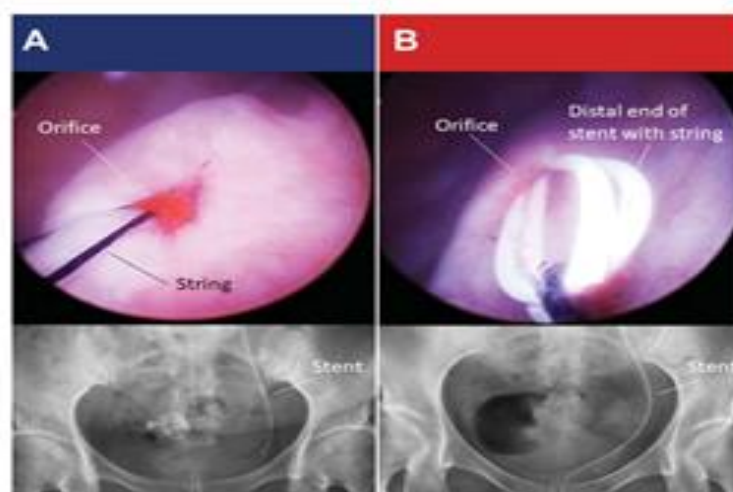
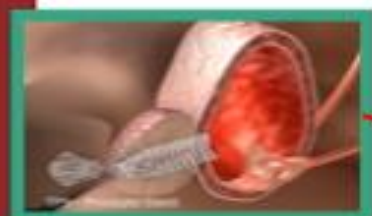


Fig. 1. Cystoscopy and plain radiography images of complete intraureteral (A) and conventional (B) stent placement.

Deployment position- demo graphics



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臺北醫藥大學
泌尿科研究中心
TMU Research Center of
Urology and Cancer



臺北醫藥大學
TAIPEI MEDICAL UNIVERSITY

腎移植團隊

報告人：尹玉聰醫師
指導老師：吳美儀主任

112.12.26

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Background



- Individuals with solid organ transplantation are more prone to develop tuberculosis (TB) due to long-term immunocompromised status
- Overall incidence of Tuberculosis in transplant recipients is 20-74 times higher than in the general population
- high risk of atypical presentation, extrapulmonary disease (16%) and disseminated TB (33%)
- Drug-drug interaction between anti-TB treatment and immunosuppressive may associated with graft rejection
- Rate of TB in transplant recipients is highly linked to endemicity of *M. tuberculosis* infection

Bumbeacca D et al. *Eur Respir J* 2012; 40: 290-1015 (a TSNET consensus statement)
Singh N, et al. *Clin Infect Dis* 1999; 27: 1266-77

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Annual Tuberculosis incidence in Taiwan



Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of cases	16,472	15,378	14,480	14,265	13,336	13,237	12,634	12,338	11,528	11,326	10,711	10,328	9,759	9,179	8,732	7,823	7,062
Incidence rate (per 100,000 population)	72.5	67.4	63.2	62	57.8	57.2	54.5	53	49.4	48.4	45.7	43.9	41.4	38.9	37	33.2	30

Taiwan Centers for Disease Control

Study Flow Chart



Patients who underwent organ transplantation were identified via the NHI dataset during 2009-2018 using procedure code as follows: heart transplant (68035A, 68035B), lung transplant (68037A, 68037B, 68047B), liver transplant (75020A, 75020B), kidney transplant (76020A, 76020B), pancreas transplant (75418B).



Subsequent TB infections cases were identified by medical orders with TB-related ICD-9 code (010-018) or ICD-10 code (A15-A19). All TB were newly infected and had no medical records with TB medical orders



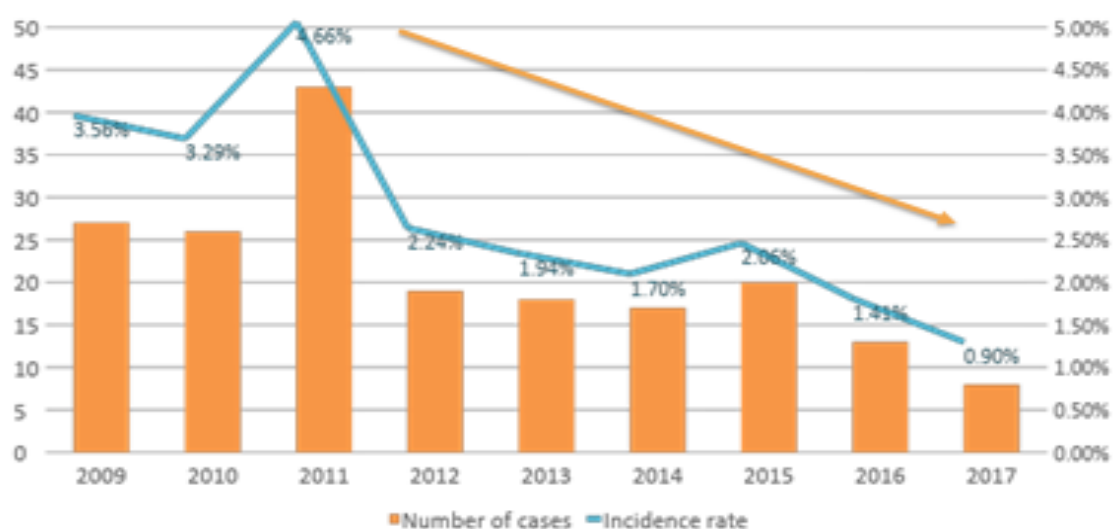
Exclusion criteria

- patient infected with Tuberculosis before 2008 (n = 176)
- age < 18 yrs

End of follow = TB infection, death, end of the study

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Incidence rate of TB among transplant recipients by year of transplantation



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Variable	All Transplants (N=7685, death=1627)		
	HR	95% C.I.	p-value
TB, Time Dependent	2.529	(1.943, 3.291)	<.0001
Sex; Male	1.190	(1.067, 1.327)	0.0018
Age Group; ref: 18-34			
35-49	1.347	(1.073, 1.690)	0.0102
50-64	1.860	(1.495, 2.314)	<.0001
64+	2.618	(2.003, 3.421)	<.0001
Comorbidities			
Stroke	1.280	(1.088, 1.506)	0.0029
Heart Failure	1.573	(1.372, 1.804)	<.0001
Hypertension	0.857	(0.768, 0.958)	0.0063
Diabetes	1.355	(1.218, 1.507)	<.0001
Dyslipids	0.871	(0.775, 0.979)	0.0205
Cirrhosis	1.277	(1.130, 1.444)	<.0001

HR= Hazard Ratio. 95% C.I. = 95% confidence intervals.

Conclusions



- Cumulative incidence of Tuberculosis in Taiwan organ recipients ~ 2.62% (higher than areas with low endemicity 0.5%)
- The rate of post-transplant TB varied by the organ transplanted (highest for lung transplant recipients)
- Low lipid profile have significant association with TB risk
- Other risk factors for post-transplant TB : male, Age > 65 years
- Risk of mortality higher in organ recipients with TB (HR = 2.53 ; 1.94~3.29)
- Routine pretransplant screening may help to facilitate optimal intervention