



臺北醫學大學 泌尿腎臟研究中心 會議記錄

時間：**112年3月23日(星期四) 14:00-15:00**

地點：視訊會議-(請以正式全名登入會議室，以利進行會議簽到)

使用 Google Meet (會議前 10 分鐘即開啟會議室)

會議室連結：<https://meet.google.com/wdk-bxsc-qza>

(敬略稱位)

會議主席：吳麥斯

與會人員：

【附醫】劉明哲、葉劭德、吳建志、林孝友、吳政誠、張景欣、陳偉傑、
顧芳瑜、羅詩修、方德昭、陳錫賢、林彥仲、吳岳霖、高治圻、
陳靜怡、葉曙慶、戴定恩

【萬芳】溫玉清、李良明、林克勳、林雍偉、蕭志豪、許軒豪、賴宗豪、
鄭仲益、陳作孝、蘇裕謀、劉崇德、楊韻紅、李明哲、鍾卓興

【雙和】吳佳璋、陳冠州、劉家宏、江怡德、鄒凱亦、高偉棠、胡書維、
魏汶玲、吳美儀、洪麗玉、鄭彩梅、邱怡仁、陳佑璋、廖家德、
游博翰、陳正憲、邱惠雯

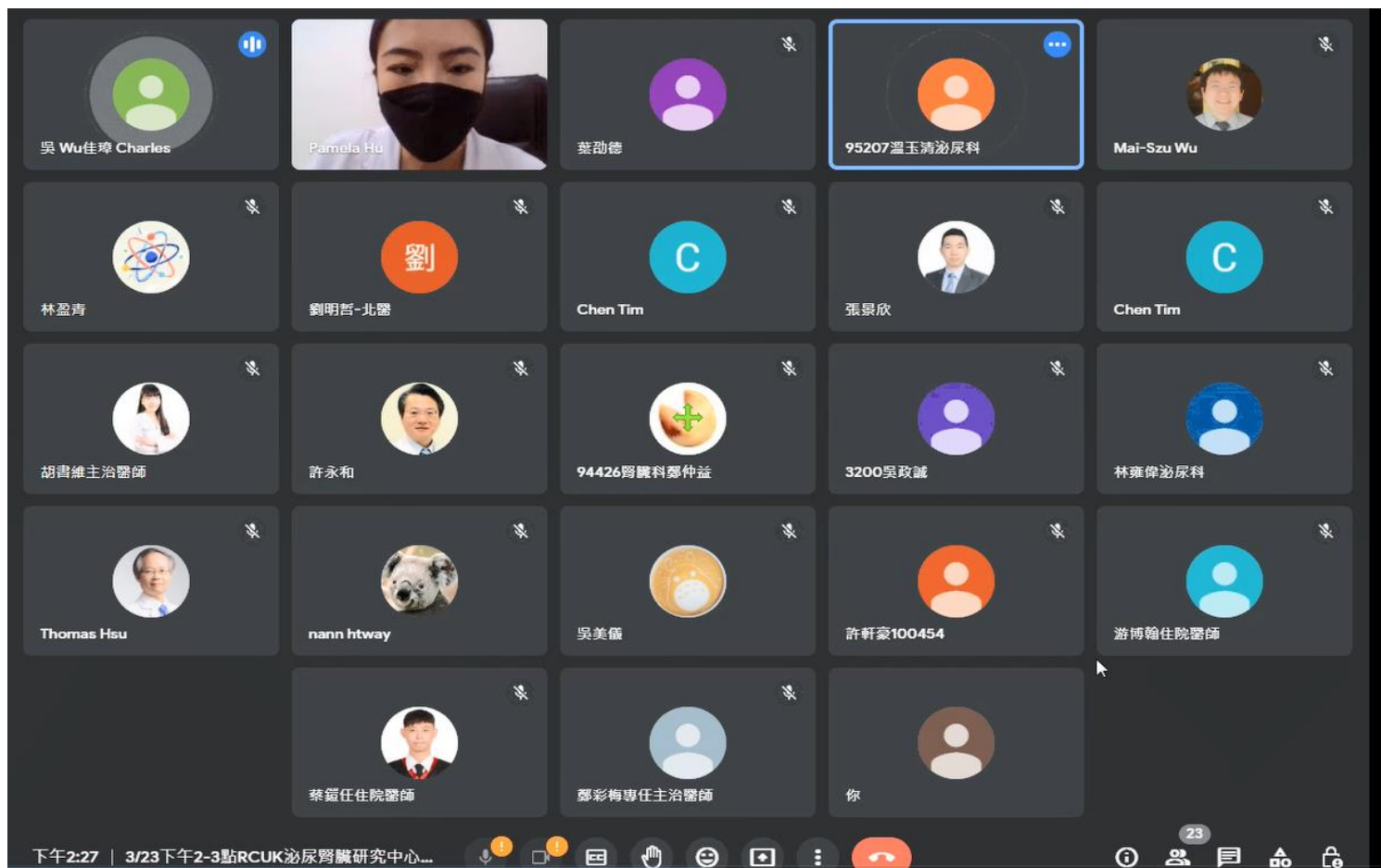
【新國民】許永和、鄒居霖

長官指導：

林建煌校長、李岡遠研發長、許志成教授、崔克宏副院長、陳瑞明所
長

議程：

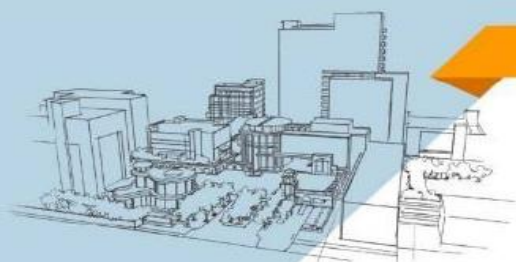
一、功能性泌尿團隊、急性腎病團隊 小組報告



2023 臺北醫學大學泌尿腎臟研究中心 例會報告: Female Stress Urinary Incontinence

單位: 功能性泌尿中心
報告人: 雙和醫院 胡書維醫師

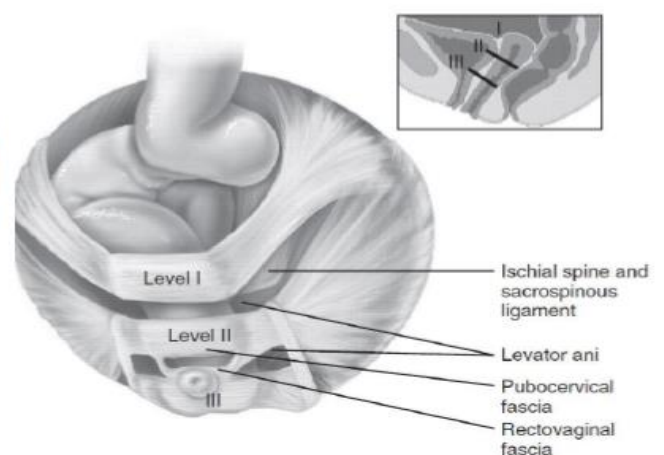
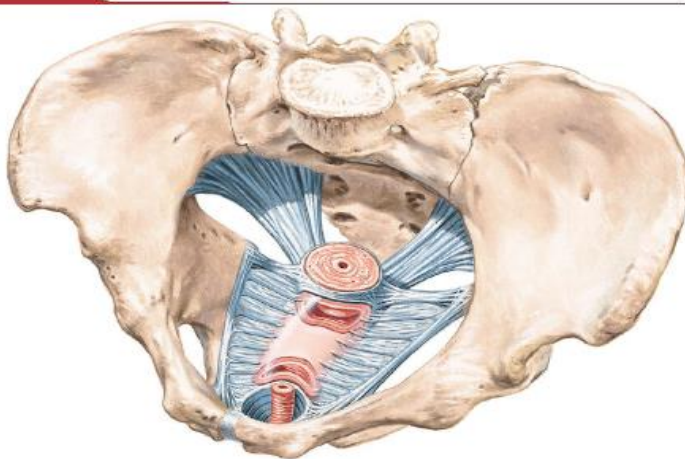
2023/03/23



TMU60 1960~2020 北醫六十 邁向榮耀

Female Stress Urinary Incontinence

- The complaint of any involuntary loss of urine on effort of physical exertion (e.g. sporting activities) or on sneezing or coughing.



DelLancey:

Level 1: the uterosacral ligament and the cardinal ligament




Level 2: the pubocervical and rectovaginal fascia as part of the paracolpium

Level 3: the superficial transvers perineal muscle and the urethra



Treatments of Female SUI

- Non-surgical
- Surgical
- Cell therapy

Non-Surgical Treatment for Female SUI

Device	Reported efficacy in SUI improvement	Advantages	Disadvantages	Cost	Photo
Pelvic Floor Strengthening Vaginal Cone	~ 70% [11]	Simple to use	Placement may be difficult with vaginal atrophy	\$25 – \$50	
Biofeedback (Elvie®, FemFit®, Perifit®, Ileva®)	87% [19]	Real time feedback	Requires smart phone, unclear accuracy	\$150 – \$650	
Intravaginal Electrical Stimulation (iTouch Sure)	50 – 60% [25]	Well-tolerated	Increased risk of vaginal and urinary tract infections	~\$75	
Combination biofeedback and intravaginal stimulation (InTone®, Attain)	68% [26]	Well-tolerated, easy device usability, over the counter		\$349	

Non-Surgical Treatment for Female SUI

Device	Reported efficacy in SUI improvement	Advantages	Disadvantages	Cost	Photo
Pelvic Floor Strengthening					
External Electrical Stimulation (INNOVO®, ELITONE®)	60–70% [25]	Non-invasive	Pain / discomfort	\$400 – \$450	
Magnetic Stimulation (Extracorporeal magnetic innervation, High Intensity Focused Electromagnetic Field)	60–70% [30, 31]	Non-invasive, keep clothes on	Must travel to a clinic for treatment	\$1000 – \$3000 for 6 sessions or ~ \$400/session	

Current Urology Reports (2022) 23:185–194

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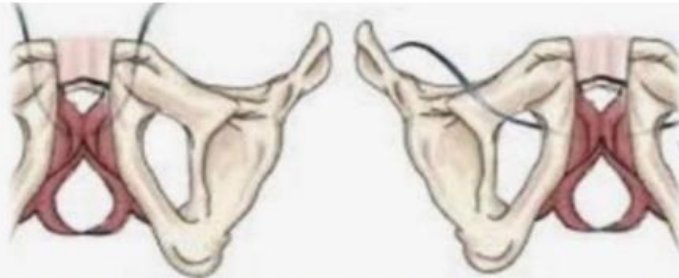
Treatments of Female SUI

- Non-surgical
- Surgical
- Cell therapy

Surgical Treatment for Female SUI

Midurethral Sling Surgery

TVT:
bladder
perforation



TVT-O:
groin pain



Treatments of Female SUI

- Non-surgical
- Surgical
- Cell therapy

Cell Therapy in Female SUI

frontiers | Frontiers in Cell and Developmental Biology

TYPE Review
PUBLISHED 08 February 2023
DOI 10.3389/fcell.2023.1090386

Advances in the molecular pathogenesis and cell therapy of stress urinary incontinence

Xiao-xiao Wang, Lei Zhang and Ye Lu*

Department of Obstetrics and Gynecology, Peking University First Hospital, Beijing, China

- Stem cells
- Exosomes
- Regulation of gene expression

→ The specific molecular pathogenic mechanisms of SUI are still unclear.

Front Cell Dev Biol. 2023 Feb 8;11:1090386

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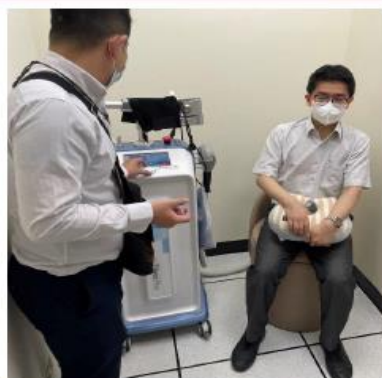
三院Female SUI治療及研究願景

- ✓ 設置骨盆健康中心: 配備biofeedback/電刺激/磁波椅/低能量體外震波等非侵襲性尿失禁治療儀器，另外依序引進PRP、陰道雷射及尿道注射等多樣治療。
- ✓ 增加婦女泌尿次專醫師及認證專家人數，進而增加三院婦女泌尿治療量能。
雙和: 陳冠州醫師、胡書維醫師(已送件)
北醫: 吳政誠醫師

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雙和醫院震波暨骨盆健康中心



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三院Female SUI治療及研究願景

✓ 將臨床和基礎醫學做結合，三院合作收案進行相關研究。

可進行之研究面向：

- 1) PRP/ Li-ESWT monotherapy or combination therapy
- 2) PRP/Li-ESWT after surgery or combination with surgery
- 3) Molecular pathogenesis of female SUI
- 4) Cell therapy combined with PRP/Li-ESWT

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日期: 2023/02/22 功能泌尿組聚餐

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RCUK AKD center 報告

CHEN YU-WEI
2023/03/23

Current research projects

- **Analysis of AKI eAlert responses**
- Analysis of AKI eAlert in other hospitals
- Modification of AKI eAlert system
- Embedment of AKI-AKD-CKD electronic system in TMU3.0
- Weaning from dialysis protocol

2


內建式計算器進行連續性靜脈對靜脈血液過濾術處方最佳化以改善重症急性腎損傷病患治療品質

Built-in calculator optimizes continuous veno-venous hemofiltration prescription to improve therapeutic quality in critically-ill acute kidney injury patients

吳浩銘^{1,2*}, 陳佑璋^{3,4,5,6*}, 吳美儀^{3,4,6}, 廖家德^{3,4,6}, 鄭彩梅^{3,4,6}, 林裕峯^{3,4,5}, 邱怡仁^{3,4,6}, 洪麗玉^{3,6}, 葉雨婷⁷, 曾健華⁸, 程毅君^{9,10}, 許永和^{3,4,5,6**}, 吳麥斯^{3,4,5,6***}

¹臺北醫學大學雙和醫院 教學部 ²國立成功大學醫學院附設醫院 教學中心 ³臺北醫學大學雙和醫院 內科部 腎臟內科 ⁴臺北醫學大學 醫學院 醫學系腎臟內科學科 ⁵臺北醫學大學 醫學院 臨床醫學研究所 ⁶臺北醫學大學泌尿腎臟研究中心 ⁷臺北醫學大學雙和醫院 資訊室 ⁸臺北醫學大學雙和醫院 急重症醫學部 ⁹臺北醫學大學雙和醫院 麻醉部 ¹⁰臺北醫學大學 醫學院 麻醉學科 *共同第一作者 **通訊作者 ***

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Keys to successful
CVVH 

CVVH
Treatment
Effect

Adequate
CVVH
Dosage

Higher

Total UF
25-35ml/kg/h

Continuous
Treatment
Time

Lower

Filtration fraction
20-25%

Calculating evidence-based renal replacement therapy –
Introducing an excel-based calculator to improve prescribing and
delivery in renal replacement therapy – A before and after study



Patients received CVVHDF
during 2012 Jan. ~ Jun.



Excel-based dose calculator
to keep at 25 ml/kg/h



Limited FF to 15%



Treatment variation, Order
changing, Filter lifespan

Advantages of FF control:



+13.7 h
average filter lifespan



- 519 £
in every 24 hrs period



- 25%
order changing

Limitation:



Only 15 patients and 28
sessions were studied



Difficult to update.
Non-sync patient data.

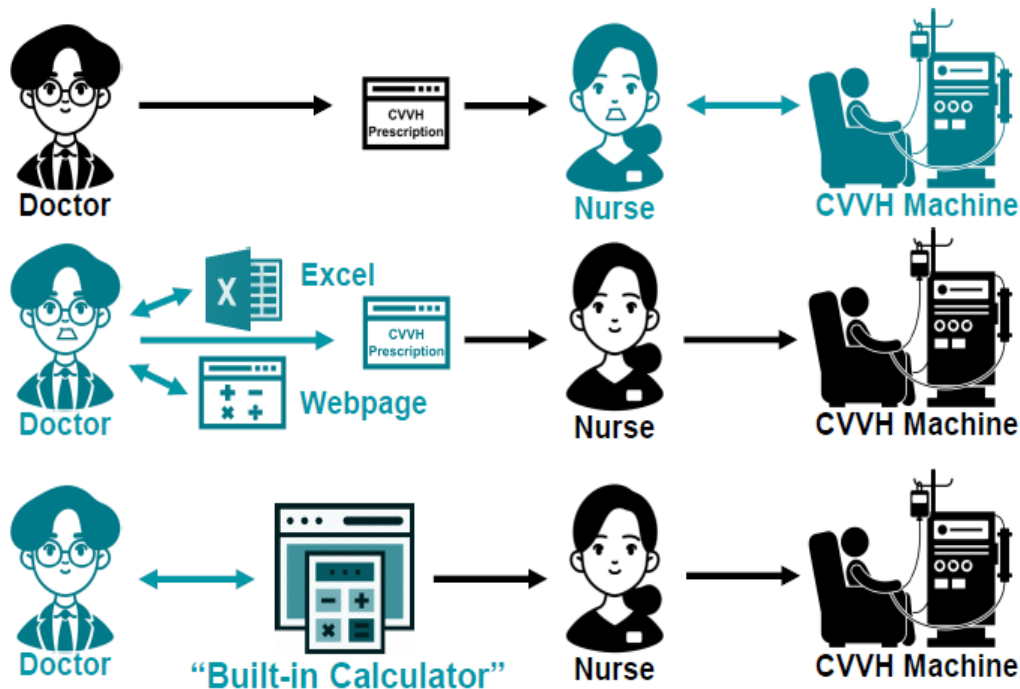


Lack data of downtime,
clotting, circuit pressure

Conclusion: Excel-based dose calculator reduced variation in prescriptions, and the control of filtration fraction prolonged filter lifespan and saved medical expenses.

Cottle et al. J Intensive Care Soc.
2016 Feb;17(1):44-50.
doi: 10.1177/1751143715603383

CVVH Prescription Calculators



Built-in calculator optimizes CVVH prescription and improves therapeutic quality in critically-ill AKI patients



衛生福利部雙和醫院
(委託臺北醫學大學興建經營)



Patients received CVVH in ICU during 2019~2021
470 patients & 793 sessions

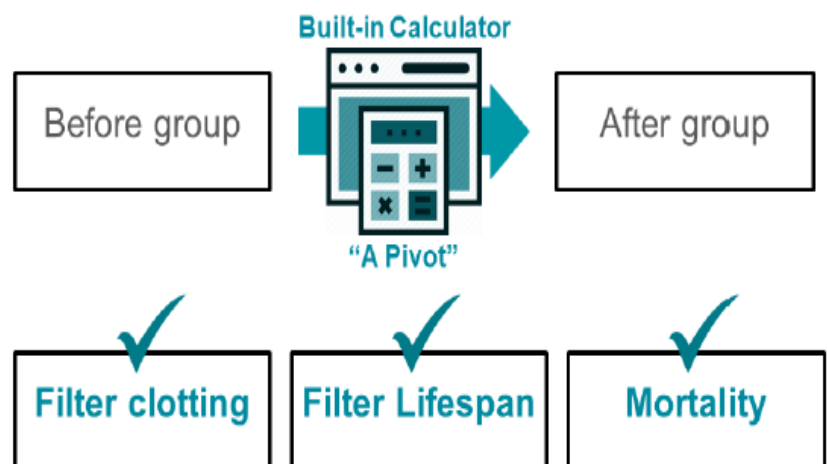


Built-in CVVH calculator utilization since 2020.10.01



Filter clotting, Filter lifespan
Mortality

Outcomes:



Conclusion:

Utilization of a built-in FF calculator reduced calculation barriers, improved treatment quality, reduced medical expenses, and saved lives.

Hao-Ming Wu, Yu-Wei Chen, et al
Unpublished data,
Manuscript in preparation
Dec. 10th, 2022

Built-in calculator optimizes CVVH prescription and improves therapeutic quality in critically-ill AKI patients



衛生福利部雙和醫院
(委託臺北醫學大學興建經營)



Patients received CVVH in ICU during 2019~2021
470 patients & 793 sessions



Built-in CVVH calculator utilization since 2020.10.01



Filter clotting, Filter lifespan Mortality

Outcomes:



-10% **+5h**

clotting average filter lifespan



- 61,600^{NTD}

in every 10 CVVH sessions



-10%

Death in ICU (30 & 60 days)

Conclusion:

Utilization of a built-in FF calculator reduced calculation barriers, improved treatment quality, reduced medical expenses, and saved lives.

Hao-Ming Wu, Yu-Wei Chen, et al
Unpublished data,
Manuscript in preparation
Dec. 10th, 2022

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Built-in Calculator

Before group



"A Pivot"

After group



Filter clotting



Filter Lifespan



Mortality

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雙和醫院



萬芳醫院



北醫附醫



新國民醫院

Thanks for your attention!

Together we can help our AKI/AKD/CKD patients!

群策群力，共進急性腎病照護!

關懷、承諾、創新