Paediatric Nephrology



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Service Model

(Clinical Working Group/Paed Nephrology) with representative from all HA Hospitals with Paed & Adol Dept

Over-arching Principles for the Service Model

- Hub and Spokes
 - tertiary/quaternary at HKCH
 - secondary/primary at Regional Hospitals
- Centralize if necessary and Localise if possible
 - uploading and downloading mechanism

Renal Services Provided in HKCH

- In-Patient tertiary and quaternary
- Day-Patient assessment, hemodialysis and plasma exchange etc
- OPD
- Consultation to other hospitals and other subspecialties at HKCH
- Out reaching OPD service by Paed Nephrologist
- Day-time subspecialist exchange program
- Training
 - Paed Nephrologist or Paediatrician with special interest or Paediatric trainee with paed nephrology exposure
- Research

Tertiary/quaternary Paed Nephrol Service

A *Paediatirc Nephrologist (PN)-led service* with concentration of all tertiary paed nephrology services at HKCH with scope covering

- 1. Chronic kidney diseases work up and management
- Renal Replacement therapy (PD. HD) and extra-corporeal treatments (PE, CRRT and others)
- 3. Kidney Transplantation
- 4. Severe and Complex Nephrology Conditions
 - Acute kidney injury requiring renal replacement therapy (haemodialysis and peritoneal dialysis)
 - Moderate to severe Chronic kidney disease
 - Complicated Nephrotic syndrome
 - Severe or Chronic Glomerulonephritis (Lupus nephritis/ IgA Nephropathy/HSPN/ Others as indicated)
 - Vasculitis with major organ involvement
 - Tubulo-interstitial disorders including renal tubular transport disorders
 - Severe hypertension
 - Renal stone disease
 - Complex congenital abnormality of kidney and urinary tract (CAKUT)
- 5. Others as needed

Renal service at regional hospitals

- Secondary or primary or downloaded cases
- Renal OPD session
- Designated staff (PN/PSI/paediatrician designated by COS) to overlook the renal service
- Outreaching PN from HKCH to renal OPD
- > to provide onsite consultation or teaching,
- > to ensure compliance to common practice statements and
- ➤ to facilitate communication and the establishment of linkage with HKCH

Paed Nephrol Service at Regional Hospitals

- Run by designated paediatrician with PN experience/training,
- General nephrology conditions:
- 1. Urinary tract infection
- 2. Nocturnal enuresis and daytime enuresis
- 3. Antenatal hydronephrosis
- 4. Acute kidney injury not requiring dialysis (if mild and uncomplicated)
- 5. Mild chronic kidney disease
- 6. Uncomplicated Nephrotic /nephritic syndrome
- 7. Haematuria / Proteinuria
- 8. Mild /moderate Hypertension
- 9. Mild cases Glomerulonephritis
 - Henoch Scholein Purpura nephritis (HSPN)
 - IgA Nephropathy (IgAN)
 - Uncomplicated cases of Post-infectious GN
- 10. As deemed appropriate

The Link - uploading

- Consensus referral conditions
- Consensus practice statements with referral criteria
 - 15 topics proposed
 - 7 covered UTI, nephrotic syndrome, IgAN, hematuria, AKI, renal stone, noct enuresis,
 - others lupus nephritis, HSPN, HTN, Antenatal HN, cystic kidney diseases, APSGN, proteinuria, evaluation and initial management of CKD....

The link – downloading

- Downloading criteria
 - the child special service at CH not needed
 - the parents agree to go
 - the receiving hospital agrees to take

Bed Requirement in 1st Phase of Service Commencement

- Translocated = 8 general renal, 4 HDU and 8 HD beds = 20
- Additional beds for tertiary cases from other hospitals = 6
- Total = 26 beds

Moving in logistics and timeline

- a) Type of patients to move in first
 - PMH and QEH in-patients & DPs (HD)
 - PMH and QEH out-patients
 - patients from other hospitals to follow within 6 mths
- b) Steps of moving in
 - IPs & DPs & OPs of PMH and QEH on the day of start of PN service
 - patients from other hospitals to follow within 6 mths

Manpower

The Manpower at HKCH

- 9 PNs (+ 5 trainees):
- IP service / OPD / On-call
- PN exchange w Regional Hospital
- Out-reaching OPD service
- Training, teaching and research
- Gap:
- Training of PN (3 not yet undergone overseas training thou some PN expertise in the initial phase)
- Trainee post to be in place 2 subspecialty, 2 rotational

Manpower planning and others

- Proposed ranking arrangement: 4 cons, 5 ACs and 5 trainees (2 subspecialty, 3 rotational) – when and timeline
- Role of interns
- Phlebotomists

On-call Roster Arrangement

- 2-tier call system:
- ➤ Paed Nephrologist off-site calls (Cons/ACs)
- ➤ Junior PN off site call with shadowing and buffering calls (senior Fellow: 3rd-5th yr)
- Trainees on-site calls (HT or junior Fellows: first 2 yrs)
- ** **dynamic** retirement, promotion, resignation, overseas training.....
- ** not too good and not too bad as compared to similar rank in regional hospital

Manpower Adjustment

- Expansion of service
- ➤ Out-reaching OPD service
 - Weekly attendance/regional hosp → 1
 FTE
- > Research: aim to lead vs to follow
 - Protected time
- > IP service
 - Referal center around



Training

Training of Paed Nephrol - where

- Basic
 - Regional Hospital
- Higher
 - Regional Hospital
 - 3 mths at HKCH (optional)
- Advanced
 - 6 mths at HKCH → Paediatrician with special interest: posting at RH (quality)
 - 2 yrs at HKCH (including 6m-12ms at overseas center) → Paed Nephrol: posting at HKCH (succession)

Training of Paed Nephrology - Post

- Paed Nephrol training post at HKCH
- subspecialty training (2)
 - → Paed Nephrologist or
 - → Paediatrician with Special Interest (PSI)
- rotational training (3)
 - → exposure of paediatric trainees (HT)

Training of Paed Nephrology - trainer

- Who is the trainer at HKCH $\sqrt{}$
- ➤ Advanced Nephrology
- Paed Nephrologist (PN)

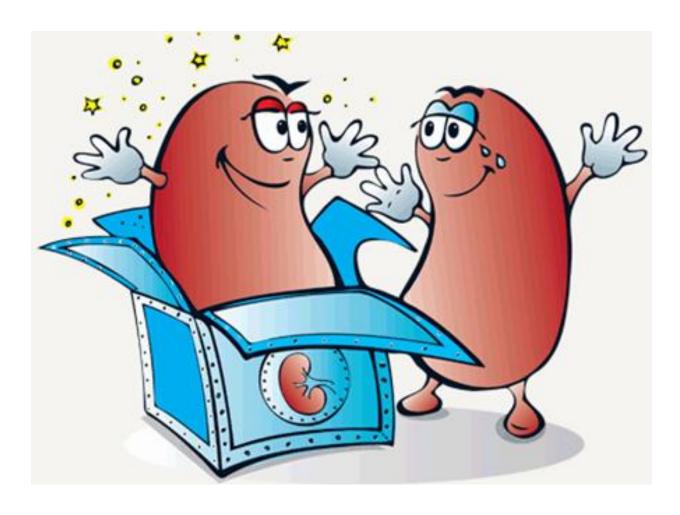
- Who is the trainer at Regional Hospitals?
- ➤ General Nephrology
- Basic Fellow
- Higher Fellow

Training of Paed Nephrology - duration

- Duration 3 yrs
- Where 1 yr at Regional Hospital
 - 2 yrs at HKCH (including overseas training)

Curriculum for Paed Nephrology

- Detailed deliberation HK Paed Nephrol Society (basic, higher, advanced)
- Basic and Higher ≈ same
- A few points:
- ➤ ARF → AKI (acute kidney injury)
- > CRF -> CKD (chronic kidney disease)
- > IVU obsolete
- ➤ Renal biopsy → optional (all to be done at HKCH)



Thank you for your attention

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Duties of Hon HKCH Commissioning Service Coordinator

Duties:

- Lead the service reorganization and formulate service model to guide the development of Paediatric Nephrology across the HA paediatric service network in the context of HKCH development.
- 2. Coordinate the detailed planning and commissioning work of HKCH in relation to Paediatric Nephrology.
- 3. Advise on the manpower and training plan as well as workforce rotation / deployment of Paediatric Nephrology.
- 4. Establish operational plan and arrangement for the commencement of hospital service.