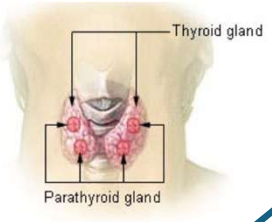
Renal Anaemia

- Normocytic
- Check Iron studies, B12/Folate before initiating EPO
- Aim Ferrtin >200 and POAC iv iron if not there
- Target **Hb 100-120g/L**
- Hb needs monitoring monthly and adjustment of Binocrit dose to achieve target,
- With hold if overshoot 120g/L
- Usual starting dose 4000 IU Weekly
- **Special authority criteria:** egfr<45 if DM, egfr <30 if not DM. Hb <100

Secondary Hyperparathyroidism in CKD

High serum **Phosphate** (b/c of ↓renal excretion)

Low Vitamin **1,25-OH D3** Levels(b/c of ↓renal production)



↑↑ PTH
Secondary Hyperparathyroidism

Low serum **calcium** (b/c of ↓ gut absorption)

Long term over stimulus, gland hyperplasia and
Eventual autonomy.

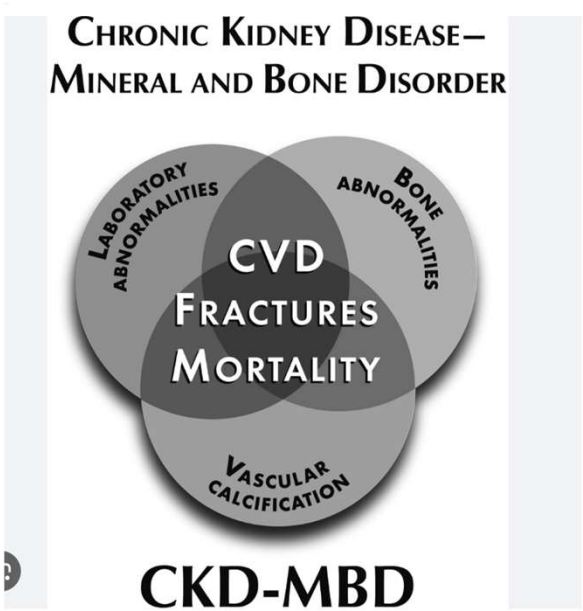
Tertiary Hyperparathyroidism

Bone disease
Calcification
Inflammation

CKD-MBD

Targets: CKD 4/5

LAB VALUE	TARGET	COMMENTS	DRUGS
Calcium	2.1-2.5	Keep in normal range	• Calcitabs away from meals • Calcitriol
Phosphate	1.0-2.0	Ideally normal range but realistically anything <2.0 is OK	• Calcitabs with meals • Alutabs with meals
PTH	aim around 3-5x ULN	avoid over suppression (adynamic bone disease)	• Calcitriol • Cinacalcet



Acidosis and Fluid

- Aim to normalise serum bicarb

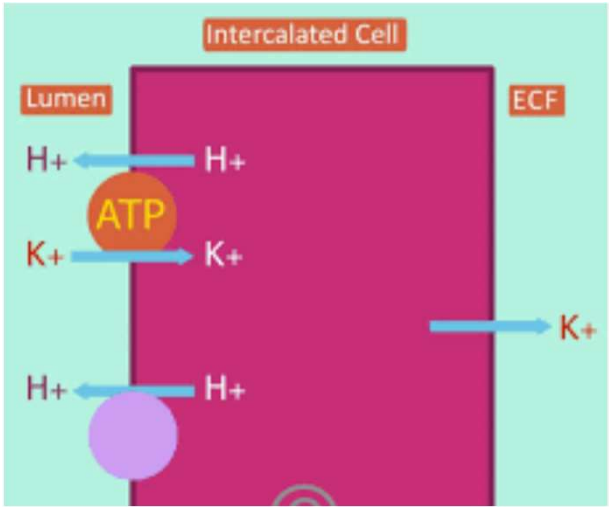
– Evidence that it slows progression

- Helps to control potassium

- Fluid restriction is super important

- Large doses of diuretics often needed

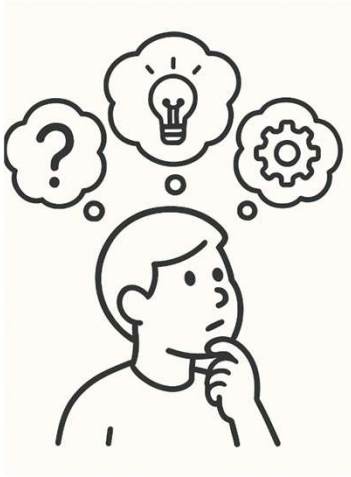
- Frusemide + chlorthalidone can be useful



Case Study Update

- After his last hospital admission he is stabilised on these medications:

DRUG	DOSE	LABS
Binocrit	6000 weekly	Hb 93 Ferritin 79, TFN satn 0.15
Calcitabs	2 bd with meals	Phosphate 2.3 Calcium 2.2
Calcitriol	0.25mcg 3x/week	PTH 32
Sodibic	2 bd	Bicarb 21
Frusemide	160mg bd	na
Losartan	100mg od	K 5.9



Thoughts

He has an appointment with the Pre-Dialysis Nurse at home

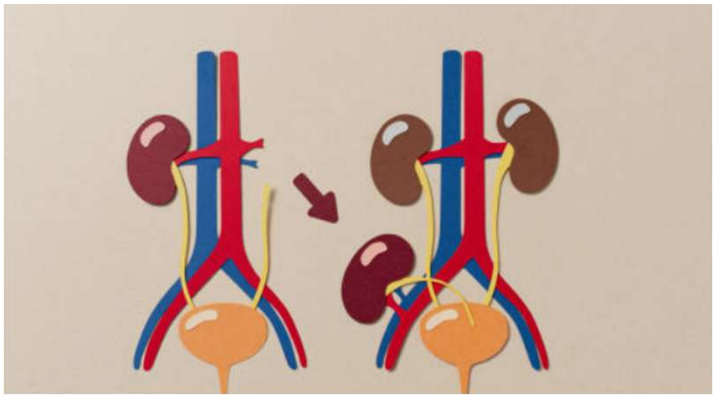
His wife is there and does most of the language interpreting and speaking

Mr KL looks a bit overwhelmed and quite down, he is not sure he wants to live if he has to have dialysis, he feels lost if he can’t work

Pre-Dialysis Education- Key content

- Renal replacement therapy or Conservative Care
- Suitability for Transplant
  - See next slide
- If for RRT then a self managed Home Based treatment is always encouraged
  - → PD or Home HD
  - → Common barriers to not being able to do home dialysis are:
  - Poor vision, poor dexterity, weakness (can't lift own bags), poor health literacy or cognitive impairment, unsuitable home.
  - → Organise dialysis access

Transplant Eligibility



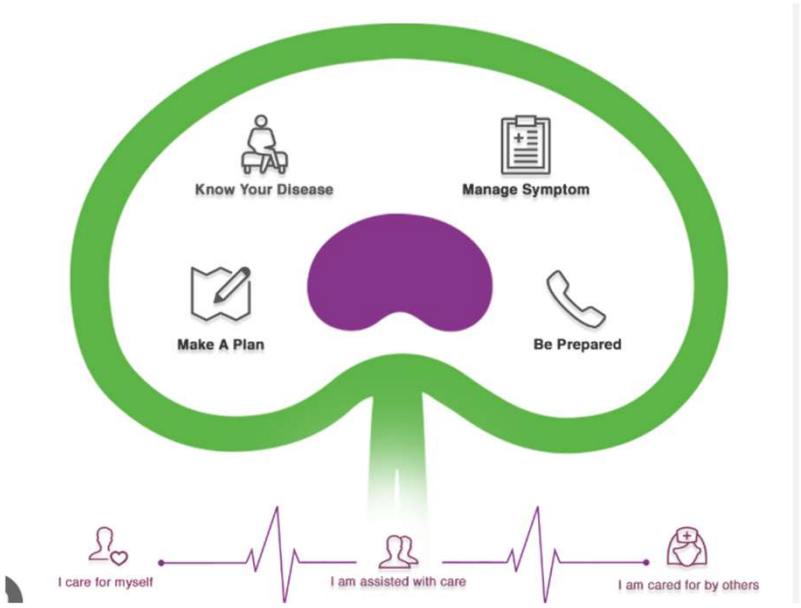
- BMI <40
- Survival Score greater than 70/75 for DD waitlist, tends to drop once on dialysis
- transplantscore.mdweb.nz
- No absolute minimum if have live donor
- Paired Exchange Programme has enhanced live donation
- Can only be active on DD list if judged to be within 6 months of needing dialysis and eGFR <15
- Live pre-emptive Tx can be done when eGFR <15

Tx Work up parameters: usually onerous and long

Usual labs
Serology for known viruses and quantiferon gold & strongyloides
Cardiac- risk stratified, complex
Lung Fxn/evaluation – if smoked etc
Cancer Screening – up to date
Dental – only if symptomatic disease
Psyhological assess – if for live donor
Fibroscan – if diabetic
ARTG physician and surgeon review

Conservative Care

Planned, holistic, patient-centered care for patients with end-stage kidney disease (ESKD) or CKD stage 5 that does not include dialysis or a kidney transplant.



Its focus is on improving the patient's quality of life, controlling symptoms, and providing psychological, social, and cultural support, rather than aggressively prolonging life through dialysis

Usually delivered in a share care model between Nephrology, Primary Care and Palliative Care teams

2 Months later Mr KL comes to clinic

Sometimes vomits

Bad taste in mouth

Fatigue

Weight loss

Nausea

Swollen legs

Poor appetite

Itchy ++ with excoriations

Feels mentally cloudy

Sleeping upright in chair

When does Dialysis Begin

1. **To preserve life**

- hyperkalaemia not amenable to medical therapy
- Acidosis not correcting with medical therapy
- Fluid overload not responding to medical therapy +/- needing oxygen
- Uraemic pericarditis

2. **When burden of ESKD symptoms outweighs potential burden of dialysis treatment**

3. **eGFR stuck at 5 or less ….. Before 1 happens**

Parameters

- Acidosis
- Hyperkalaemia
- Fluid overload requiring oxygen
- -all not responding to medical management
- Uraemic pericarditis

Softer parameters

- Tiredness, lethargy
- Weight loss
- Poor appetite, nausea, vomiting
- Pruritis
- Restless legs
- Some overload

Final Update Mr K.L.

- After some good sessions with the **Renal Psychologist** he accepted the need for dialysis and began Peritoneal Dialysis
- His wife was co-trained on how to change the bags etc
- As Mr KL began to feel more well again, he took over all of his own dialysis
- 6 months later he has enough energy to return to full time work, with 1 bag exchange done in his office around mid day each day
- He prides himself on adjusting the bags to keep to Goal Weight and keeps a daily record of BP and weight and also keeps track of his monthly blood tests
- He has almost completed the medical evaluation for transplant waitlisting