Twitter Thread by BukuEndocrinology

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So this weekend you heard from our friends @BukuRenal that mismanagement of IV fluids can cause harm.

A group we'd like to highlight who can come to serious harm from ■■/■■ fluids is patients with

■DIABETES INSIPIDUS ■

See below ■

#medtwitter #FOAMed

Diabetes insipidus (DI) is the inability to hold onto water due to lack of /resistance to ADH.

Remember ADH is released as serum osmolality ■■ to ■■ renal water reabsorption, but in patients with DI this doesn't occur and so they pass large vol watery urine - can be >10L/day!■

Note diabetes insipidus has nothing to do with glucose/sugar like diabetes mellitus! ■■■■■

Misunderstandings are so common (even with HCPs) that there is a campaign to change the name to "pituitary insipidus"

#NoTimeToDI

Cranial DI (ADH not released) is usually due to pituitary/hypothalamic surgery, infiltration (inflammation/malignancy - rare) or head trauma. Can also be genetic.

Pituitary adenomas themselves can cause lots of hormone dysfunction, but don't typically cause DI.

Nephrogenic DI (ADH resistance) can be caused by
- renal disease
- electrolytes (■■ K, ■■ Ca – hence why hyperCa is dehydrating)

- drugs - can be seen with up to 15% of people taking LITHIUM ■

Outwith the neurosurgical ward, you are most likely to come across patients with a prior established diagnosis of DI.

They may have multiple other hormone deficiencies (e.g. cortisol, thyroid, sex hormones, growth hormone).

When well, people with DI can usually manage their fluid balance (and sodium) by drinking in response to thirst.

Adding synthetic ADH (desmopressin) – nasal spray or tablet – also helps by ■■ UO and so ■■polyuria/nocturia when given at■ - can be very important for QOL!

■In hospital this balance can go wrong:■■

– ■■ fluid losses (e.g. fever, vomiting)
- ■■access to meds and/or fluids (esp if confused, drowsy, NBM etc)

= profound dehydration and ■■■■ Na despite “reassuring” UO

Sadly this has led to several deaths.

So what can you do?

1.RECOGNISE DI – from PMHx, drug hx, medic alert, electronic record alert and SHARE INFO WITH TEAM ■

-> rare condition often = ■■ awareness

2.Give usual desmo - ■CRITICAL MED■

3.Alert endo team ■

4.Monitor – Na AT LEAST DAILY, fluid in/out

■■Na (i.e. dehydration) is concerning:

1.Consider ■■ level care and d/w specialist asap

2.Give desmo – can be given IV/IM (get help w conversion!) if usual routes not available ■

3.Aim to bring down Na SLOWLY with fluids (<10mmol/24h)

5.■ Na e.g. 4hrly, fluid in/out..

■■Na can also occur:

- those taking Desmopressin will struggle to excrete excesses if given too much fluid
- d/w specialist - may require Desmopressin dose change or delay to allow for controlled diuresis

Allow pt to take fluid orally (v IV) if possible so can self-regulate ■

How confident are you in caring for people with DI?

Did you know the Society for Endocrinology has published advice about DI for non-specialists?

You can find that here ■

https://t.co/kHjDRH7G4G