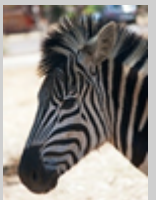




Edition 53



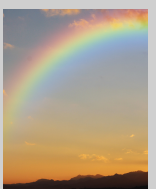
Spot diagnosis: The case of playpark adventure gone wrong!



Zebra of the week: Addisonian Crisis



Patient safety: Advancing diagnostic excellence



Wellbeing: Growth vs fixed mindset



SPOT DIAGNOSIS: The case of a playpark adventure gone wrong!

The beginning:

A 15-month-old boy has been brought to ED by his mum. He had been at the playpark with his 4-year-sister and was running when he fell on to his out stretched arms. He cried immediately. Mum gave him analgesia at home however he has not been using his right arm since the injury.

On inspection of the arm, there is no obvious deformity however he has an area of focal tenderness on palpation. You decide to perform an X-ray and this is what you see...

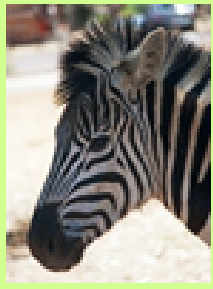
The middle:



The end:

All will be revealed on Friday...

If you know diagnosis email for a chance to win a prize!
(ed.daily.education@gmail.com)



ZOTW: Addisonian Crisis

Adrenal insufficiency is characterised by a deficiency of glucocorticoids (and to a lesser extent mineralocorticoids), and a crisis can occur when the body's demand for steroids exceeds that available. Precipitants include infection, trauma, surgery, missed steroid doses, dehydration and pain.

Presentation

Most symptoms are non specific

- N+V
- Fever
- Weight loss
- Delirium
- Hyperpigmentation (buccal mucosa, scars, palmar creases)
- Reduced GCS
- Hypotension
- Muscle weakness/cramps
- Abdo pain
- Hypovolaemic shock

Investigations

- FBC, U+E, LFT, CRP
- Septic screen

- If undiagnosed adrenal insufficiency, consider sending a paired cortisol and ACTH pre-hydrocortisone administration (providing this will not delay treatment)

- ECG

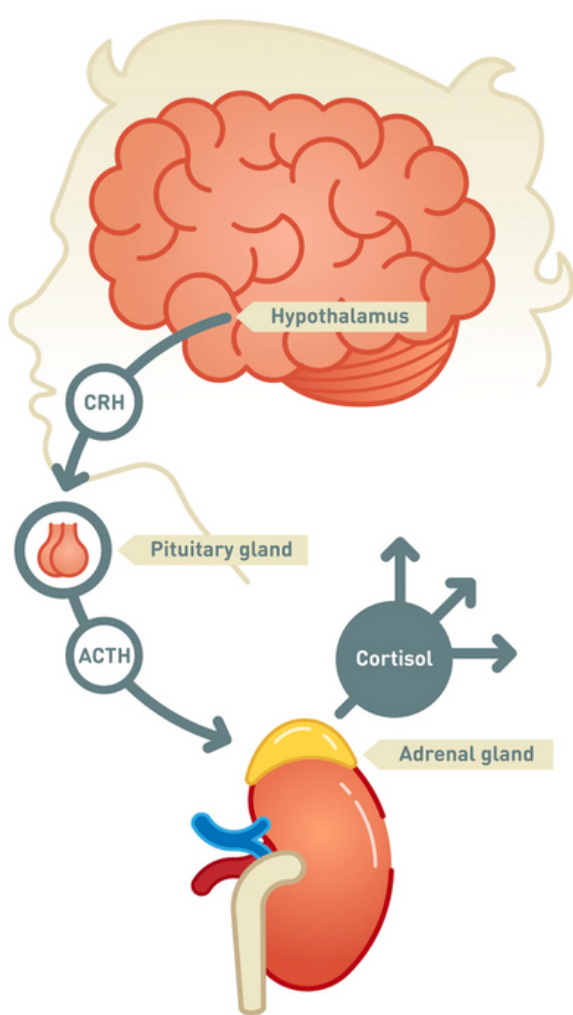
Primary	Secondary
<p>Destruction of the adrenal gland</p> <ul style="list-style-type: none"> - Autoimmune (Addison's) - Neoplastic - Surgical removal - Infective (TB, syphilis) - Haemorrhage - Infarction - Sarcoidosis 	<p>Suppression of the adrenal axis</p> <ul style="list-style-type: none"> - Exogenous steroid use - Hypothalamus: neoplasms, surgery, radiotherapy - Pituitary: surgery, infections, radiotherapy, congenital aplasia, ACTH deficiency

Bloods

- Hyponatraemia
- Hyperkalaemia
- AKI
- Hypoglycaemia
- Calcium may be raised

Treatment

- IM/IV 100mg hydrocortisone stat and repeat every 6 hours until improved clinically and haemodynamically.
- An alternative would be a continuous IV infusion (200mg/24hrs)
- Paeds - initial hydrocortisone dose usually 25mg in infants and 50mg in children
- Fluid resuscitation
- May require ITU for electrolyte correction
 - Monitor U&Es regularly
 - Cardiac monitoring
- Identify and treat precipitant



References

[RCEM: Addisonian Crisis](#)

[Patient.co.uk: Adrenal crisis](#)

[Patient.co.uk: Adrenal Insufficiency and Addison's Disease](#)

[NIH: Definition & Facts of Adrenal Insufficiency & Addison's Disease](#)



PATIENT SAFETY

thebmj Visual summary

Advancing Diagnostic Excellence

Five strategies for clinicians

Diagnostic excellence involves making a correct and timely diagnosis using the fewest resources while maximising patient experience and managing uncertainty. Based on current scientific literature, expert opinion, and theoretical frameworks pertaining to diagnostic decision making and learning, we propose five strategies for clinicians to consider to achieve diagnostic excellence and reduce diagnostic error in their practice.



Strategy

Why

How

Seek feedback on diagnostic decisions

- Fosters better understanding of your own diagnostic accuracy
- Ensures better calibration of future decisions

- Create an electronic list of patients where diagnosis-related questions remain
- Solicit feedback from colleagues and patients on your performance

"Byte" sized practice

- Test-enhanced learning promotes knowledge acquisition and skill development

- Integrate brief diagnostic challenges from apps, social media, and medical journals into your daily routine

Consider biases

- Encourages awareness of fallibility in clinical decision making
- Promotes humility
- Increases recognition of the impact of harmful societal forces (such as racism) on diagnosis

- Find common ground, foster individuation, and build empathy
- Use practice level data to identify harmful patterns in diagnostic evaluation
- Consider if alternative diagnostic possibilities would be entertained if a patient had a different background or identity

Make diagnosis a team sport

- Diagnosis is not just the purview of doctors alone

- Flatten hierarchy and elevate voices of all health professionals on the diagnostic team
- Seek opportunities for group decision making with colleagues and invite patient concerns and opinions about diagnoses
- Use technology to augment decision making

Foster critical thinking

- Optimises data acquisition and interpretation throughout the diagnostic process

- Take a sceptical stance towards your initial provisional diagnosis by looking for data to both support and contradict it
- Commit to monitoring and collecting more data and setting prompts for further investigation if the patient doesn't improve

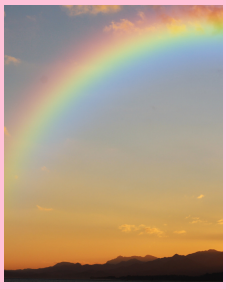
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WELLBEING

What Kind of Mindset Do You Have?



I'm either good at it, or I'm not.
 When I'm frustrated, I give up.
 I don't like to be challenged.
 When I fail, I'm no good.
 Tell me I'm smart.
 If you succeed, I feel threatened.
 My abilities determine everything.



I can learn anything I want to.
 When I'm frustrated, I persevere.
 I want to challenge myself.
 When I fail, I learn.
 Tell me I try hard.
 If you succeed, I'm inspired.
 My effort and attitude determine everything.



FIXED MINDSET		GROWTH MINDSET
<ul style="list-style-type: none"> SOMETHING YOU'RE BORN WITH FIXED 	SKILLS	<ul style="list-style-type: none"> COME FROM HARD WORK. CAN ALWAYS IMPROVE
<ul style="list-style-type: none"> SOMETHING TO AVOID COULD REVEAL LACK OF SKILL TEND TO GIVE UP EASILY 	CHALLENGES	<ul style="list-style-type: none"> SHOULD BE EMBRACED AN OPPORTUNITY TO GROW. MORE PERSISTANT
<ul style="list-style-type: none"> UNNECESSARY SOMETHING YOU DO WHEN YOU ARE NOT GOOD ENOUGH 	EFFORT	<ul style="list-style-type: none"> ESSENTIAL A PATH TO MASTERY
<ul style="list-style-type: none"> GET DEFENSIVE TAKE IT PERSONAL 	FEEDBACK	<ul style="list-style-type: none"> USEFUL SOMETHING TO LEARN FROM IDENTIFY AREAS TO IMPROVE
<ul style="list-style-type: none"> BLAME OTHERS GET DISCOURAGED 	SETBACKS	<ul style="list-style-type: none"> USE AS A WAKE-UP CALL TO WORK HARDER NEXT TIME.



CONTRIBUTORS TO THIS WEEKS 'PICK AND MIX':

References:

[Childhood101](#)

[Growth vs fixed mindset](#)

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