ROYAL COLLEGE of PHYSICIANS of EDINBURGH

Evening Medical Update: Diabetes and Endocrinology October 2022

An update on calcium disorders - Dr Rachel Crowley, Consultant Endocrinologist, St. Vincent's University Hospital, Dublin, Ireland

Dr Rachel Crowley, steroid in granulomatose disease, what if the disease is TB?

If a patient needs a steroid for any condition, then the guidelines for glucocorticoid-induced osteoporosis should be followed. In TB treatment of the underlying disease should address hypercalcaemia.

Dr Rachel Crowley, what investigations would help you to identify the causes of hyperglycaemia, other than checking PTH?

PTH check is the first step to separate out PTH-dependent from independent hypercalcaemia. If PTH is increased I check 25 OH D and urine calcium clearance. If PTH is low I look for malignancy and granulomatous disease.

Dr Rachel Crowley, how long do you need to stop thiazide diuretics for before checking urinary calcium?

At least a week

Dr Rachel Crowley, great talk Do you have experience in using Denosumab for hypercalcaemia of malignancy for Zolendronate refractory cases? Thanks

Yes, oncologists use this in our institution, and it has been effective. It is suggested by an American group on the UpToDate advice platform. Check locally if authorisation for this use - usually more directed at other adverse skeletal events in malignancy.

Dr Rachel Crowley, in patients with sarcoidosis requiring steroids, do they need bone protection (calcium, vitamin d etc.)? When some have hypercalcaemia risk through the vitamin d synthesis of sarcoid pathophysiology

If a patient needs a steroid for any condition, then the guidelines for glucocorticoid-induced osteoporosis should be followed. Consider the duration of steroid use, as per guidelines. Calcium and vitamin D supplementation alone are not bone protection.

Dr Rachel Crowley, thank you for the excellent talk...the arrythmia patients that need monitoring with Calcium IV - do they include AF and atrial flutter?

These arrhythmias have a lower association with calcium fluctuations than they do with low potassium or magnesium

Dr Rachel Crowley, why do you need to give calcium citrate for patients on PPI

If a patient is not meeting their dietary requirements for calcium then they must meet this requirement by supplement. If they are on a PPI then they do not make sufficient gastric acid to absorb calcium carbonate supplements. Calcium citrate and acetate supplements do not have this requirement.

Dr Rachel Crowley, in osteoporosis, forsteo is licensed for 2 years in lifetime. What about when used in hypoPTH?

It is an off-license use. There are series reported with over 9 years of follow up.

Managing diabetes in the AMU – Professor Mark Strachan, Consultant in Diabetes and Endocrinology, Western General Hospital, Edinburgh

Professor Mark Strachan, post prandial hyperglycaemia? Any entity and Treatment

Yes, this does exist. In the context of in-patients though, we don't generally monitor post-prandial glucose. A target of 6-12 mmol/l for pre-prandial glucose is suffiicient.

Professor Mark Strachan, would you advocate VRIII to control hyperglycaemia in patient with ACS/acute stroke?

Not specifically. The risk of this is causing hypoglycaemia. If blood glucose is between 6-12 mmol/l then that is sufficient. If glucose is above that, then subcutaneous insulin (or a sulphonylurea) should be sufficient, unless the patient is ketoacidotic.

Professor Mark Strachan, what is a safe level of hyperglycaemia to discharge a patient with? It's sometimes difficult to titrate anti diabetic meds in amu as the pt has a very short stay and we can't see trends

People with diabetes at home frequently have blood sugars in the teens and twenties! So, providing the patient is not ketotic, then it would be unusual to need to keep a patient in hospital to optimise glycaemic control (unless there were frequent hypos and safety concerns about their ability to recognise and treat). If glucose is above taget, then the key thing on discharge is to ensure there is a plan for very soon telephone follow-up with the diabetes team

Professor Mark Strachan, would SGLT-2 inhibitors be best avoided in someone with a perianal fistula?

Tricky one, but probably yes.

Professor Mark Strachan, is there a place for continuous glucose monitoring Libre or Dexcom for close monitoring in non diabetic patients admitted with stress induced hyperglycaemia?

As a rule, no. If it is true stress hyperglycaemia, with a normal HbA1c on admission, then the hyperglycaemia will resolve as the acute illness is treated

Professor Mark Strachan, I often see patient with HFrEF and diabetes in clinic but already on a smattering of tablets … I wish to improve their oedema and LVEF with Dapaglifozin, which diabetic medications can be stopped to reduce their drug burden or can it simply be added on ?

Depends on the prevailing glucose control. If they have an HbA1c above target then the Dapagliflozin should be an add-on to existing therapy. If they have in-target HbA1c, then sulphonylureas should be stopped or reduced first. Gliptins should be stopped second.

Professor Mark Strachan, I would like to ask, do the high dose long term use of potent storied is a cause for storied-induced diabetes?

High dose steroids will precipitate diabetes in people at risk – older people, overweight, high-resik racial groups and pre-diabetics.

Professor Mark Strachan, from your experience with the SGLT2 inhibitors, do patients with long-term urinary catheters have a greater risk of urinary tract infection over and above standard risk/

Yes, I would generally not use SGLT2i's in this group

Professor Mark Strachan, How safely we can incorporate the oral hypoglycemic drugs like gliflozins in the critical care setting for stable patients or as a bridge to therapy for glycemic control ?

I would generally not use an SGLT2i in a critical care setting due to the risk of euglycaemic ketoacidosis

Professor Mark Strachan, How do you manage insulin pumps during end of life care please?

This is complicated and I would discuss on an individual basis with the diabetes team. In general you would have the patient on a low basal rate that is maintaining glucose levels above the hypoglycaemia range and avoiding extremes of hyperglycaemia