KISS - Managing Clinical Groups During The Coronavirus Pandemic

A matter of considerable concern for primary care clinicians is how to manage patients with specific chronic diseases during the coronavirus pandemic, who are often on complex, immune-suppressing therapies.

It will come as no surprise that there is a lack of data on managing these group in the current crisis, but regardless there is guidance emerging which is highly relevant to us and our patients, based around our knowledge of previous viral infections and early COVID-19 data. This provides an answer on what should be stopped and when, and what should be continued, sometimes no matter what.

For the full guidance follow the links - we have summarised the key points.

Diabetes - guidance from the Primary Care Diabetes Society

- It highlights the increased risk of metabolic decompensation in this group during COVID-19 infection. It encourages patients to have adequate supplies of both medications and testing equipment, especially for those requiring ketone monitoring.
- ***Patients should follow the SICK rules for managing intercurrent illness***:
  - S = sugar: glucose levels may be raised, monitoring regularly, some meds may need to be increased temporarily (e.g. sulphonylureas, insulin) to compensate for this
  - I = insulin: never stop insulin or oral diabetes medications (although metformin and SGLT2i may be stopped temporarily if risk of dehydration); insulin doses may need to be raised
  - C = carbohydrate: maintain hydration and carbohydrate intake; if vomiting or unable to eat replace food with sugary drinks, then modify based on glucose levels - go sugar-free if raised, with sugar if low
  - K = ketones: in T1DM measure ketones every 2-4h, give extra rapid-acting insulin doses if ketones present, encourage good hydration to flush through ketones
    - This is also important in unwell patients on SGLT2i who can have euglycaemic DKA, and only ketone measurement will reveal the progression to danger.
- There is a ***very clear algorithm for managing dosing of rapid-acting insulin*** for both T1DM and T2DM
- Patient info can be found on Diabetes UK

DMARDs - guidance from the British Society of Rheumatology

This guideline is very secondary care orientated but the messages regarding immunosuppressants during illness are useful for us as well.

- Immunosuppressants rather than the underlying disease are the largest indicator of risk in rheumatology patients; combinations of immunosuppressants confer a higher risk.
- It is easiest to consider all DMARD therapy as at least high risk (including pred monotherapy ≥20mg/day), and biologics, mycophenalate, tacrolimus and cyclophosphomide as very high risk
- However, it is NOT recommended to stop any medication prophylactically during the pandemic.
- If a ***patient develops COVID-19 then they should follow normal protocols for DMARD therapy during an infective illness - essentially patients should stop the immunosuppressant until they have recovered, in conjunction with advice from their specialist*** (in reality specialist input may become difficult in the next few weeks and we'll have to manage this pragmatically in primary care). ***Abrupt cessation of prednisolone is, of course, the obvious exception***.
- More detailed guidance on indications for the cessation of DMARDs can be found in A KISS from NB - monitoring of DMARDS.
- A guide for rheumatology patients can be found on the Versus Arthritis website.

Asthma/COPD - guidance from the Primary Care Respiratory Society

Respiratory illness is a key feature of COVID-19 (although not always present) and this will be challenging to separate it from a flare of an asthma/COPD patient's existing disease. Given the lack of data currently, the PCRS UK has made some practical observations.

- Patients should continue the use of their prescribed preventer treatments - there is no data showing inhaled corticosteroids increase the risks from COVID-19.
- Respiratory crisis in this group may be due to viral pneumonia (a common feature of COVID-19), airways disease due to a viral trigger, or the usual alternatives for driving flares. Be mindful about fear and anxiety as well.
- ***Patients presenting with an asthma attack or COPD exacerbation should be managed as per existing guidance using inhaled and oral corticosteroids***. It is advised to use these for the shortest duration necessary to control the flare.
- For COPD patients consider whether oral steroids are really needed - in patients with a less steroid-responsive phenotype (e.g. low eosinophils on past FBC) it may be possible to avoid them. Encourage use of bronchodilatation, breathing exercises and pacing to aid control of symptoms.
- Patient info can be found on the British Lung Foundation website.

Multiple Sclerosis - guidance from the MS Advisory Group

Two sections to this guidance - 1st part is aimed at MS specialists, 2nd part at patients.

- ***Key message is if a person with MS develops COVID-19 they should stop any treatment (oral and injectable) immediately***. It is unclear when it is best to restart. Clearly the specialist should be informed and further decisions will be taken by them.
- Most treatments are ok to continue during the pandemic. Fingolimod and ocrelizumab have a moderate increase in the risk of viral infections, although are likely to be continued. Alemtuzumab and cladribine have a significantly higher risk of viral infections for 3-6 months after use and treatments are likely to be delayed until after the brunt of the pandemic. Stem cell transplantation confers the highest risk and should not be done at present.
- For patients, the same link provides very clear info.

Cardiovascular Disease

We can find no specific guidance currently from any international body with direct relevance to primary care but the European Society of Cardiology has two simple messages:

- ***Do not forget the needs of people with CVD*** - it suggests there will still be more deaths from CVD this year than the COVID-19 pandemic.
  - It has already released a statement saying patients should NOT stop their ACEi/ARB during the pandemic, a thought echoed from American cardiology societies although, with the caveat that: "***in the event patients with cardiovascular disease are diagnosed with COVID-19, individualized treatment decisions should be made according to each patient's hemodynamic status and clinical presentation***".
  - The Centre for Evidence-Based Medicine goes one step further and suggests there is a theoretical increased risk-based around the angiotensin system and how RAAS drugs act on it. It has produced an algorithm which suggests:
    - The majority of patients without infection should continue with ACEi/ARB
    - If a patient develops the infection and they are taking it for long-term harm reduction (e.g. mild hypertension, renal protection in T2DM) it may be safer to stop it temporarily
    - Infected individuals who take ACEi/ARB for 'current benefits' (e.g. heart failure, severe hypertension) are likely to need to continue.
  - It should go without saying that clinical judgement needs to be exercised and we should consider the standard sick day rules for drugs which could drive acute kidney injury balanced against the risk of cessation.
- ***Patients with ACS do need to go to hospital***, even during the crisis. In fact, they believe there will be an increase in acute cardiac events during the pandemic due to the infection, which has been seen with other infections in the past.
- They are releasing new videos/podcasts as they as able, with one scheduled to be on COVID and chronic CVD.