

Paediatric Abdominal Pain Pathway

Objectives:

1. Facilitate the timely and appropriate assessment and treatment of children who present to CUH with acute abdominal pain
2. Ensure that the risks of nosocomial COVID infection (to staff and vulnerable patients) are reduced to a minimum by isolating appropriate children upon arrival to hospital in the ED and up on the wards for those requiring admission.

Background:

Corona Virus Disease – 2019 (COVID 19) is the disease caused by a novel coronavirus named SARS – CoV – 2. It belongs to the same family of viruses as SARS and MERS

Clinical features in symptomatic children are somewhat different to adults. Children tend to have milder illness. The most common presenting features are cough and fever, occurring in over half of symptomatic patients. Upper respiratory tract symptoms such as rhinorrhoea and sore throat are also relatively common, occurring in 30-40% of patients. It is not uncommon for children to have diarrhoea and/or vomiting (around 10% of cases), even in some cases as their sole presenting features.

It is recognised that asymptomatic carriage occurs frequently in children. Health Care workers are thus at a significantly increased risk of becoming infected with coronavirus if recommended isolation and personal protective procedures are not followed.

Abdominal pain as a presenting symptom in isolation or with fever has not been reported in the literature to the author's knowledge, however there are concerns that these children may be carriers (symptomatic or asymptomatic) of the coronavirus. Abdominal remains a common presentation to the Emergency Department (ED) and the general surgical services. In January 2020 alone, 106 children presented to the ED with abdominal pain of which 37 were admitted under the general surgeons. Recent intercollegiate surgical guidelines are advising against laparoscopic procedures in patients with suspected COVID. Furthermore, operating on a patient with suspected or diagnosed COVID has significant implications for theatre availability in that it takes many hours to prepare and then clean a theatre once it has been used in this situation. These factors introduce new complexities in the investigation and management of this patient group.

Pathway Overview:

This pathway has been developed by the general surgical, paediatric and emergency departments.

All children with abdominal pain as their main symptom will continue to be streamed to the ED where they will be clinically assessed by a paediatric ED nurse and paediatric ED doctor. Children with abdominal pain will be isolated if there is any one of;

- Fever within the past 24 hours
- Vomiting or diarrhoea,
- Respiratory symptoms

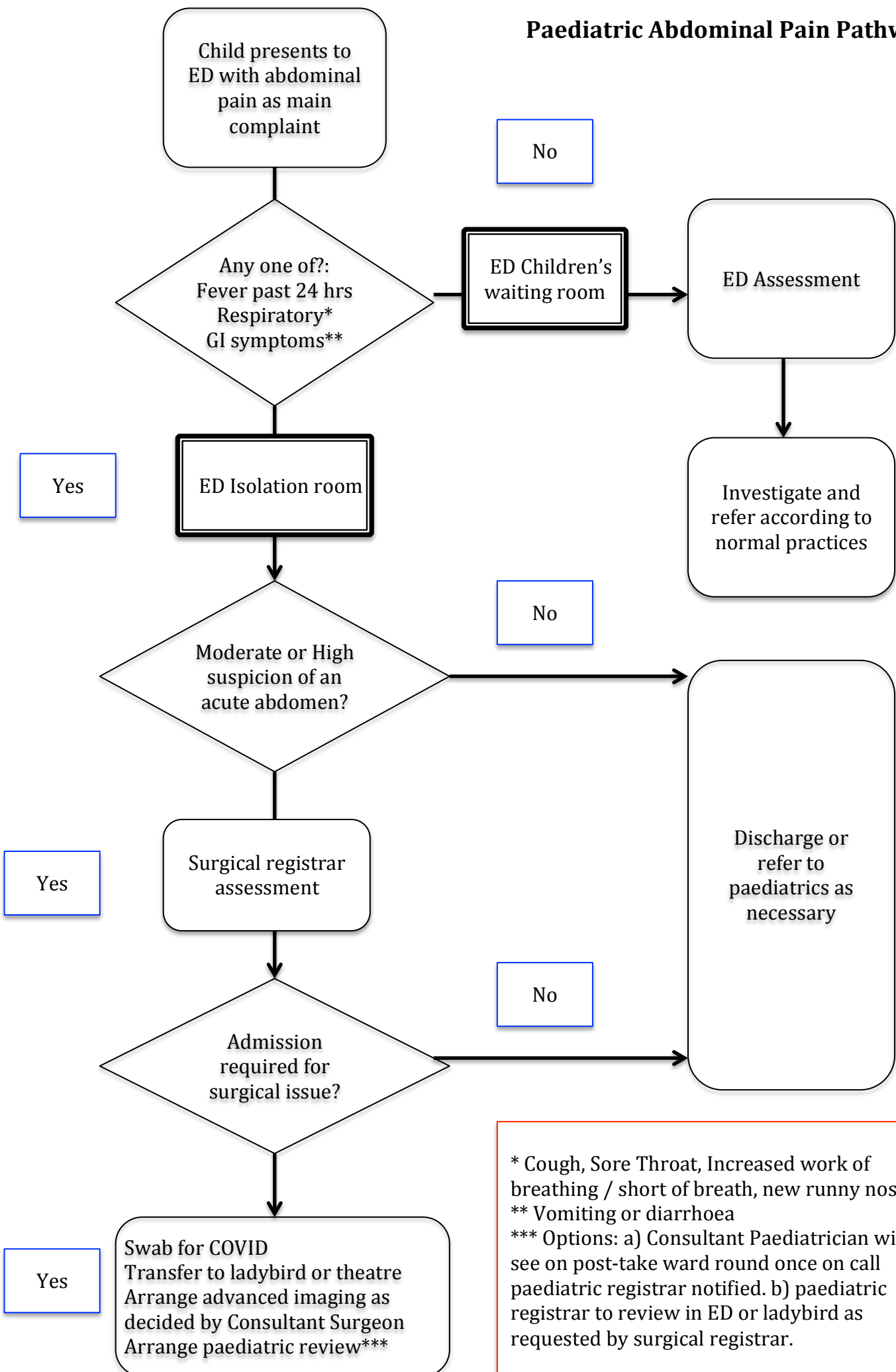
If the paediatric emergency doctor assesses the patient as having a moderate or high probability of having an underlying surgical cause to their pain, a referral to the surgical registrar will be made. After a surgical review the child may need a paediatric team review based on the discretion of the surgical registrar or consultant, in particular with children who are young eg <5 years old or have comorbidities or atypical symptoms and signs. Bearing in mind that this child will usually have been assessed by a paediatric ED doctor, a further paediatric review can be carried out by a paediatric registrar (afterhours) or by a consultant paediatrician (in hours) after review by the surgical team. This can occur on Ladybird ward. Appropriate treatment and investigation should not be withheld while awaiting this paediatric assessment to take place, if the child is thought to have an acute abdomen. The doctors in the emergency department will facilitate these investigations eg Blood investigations, urine cultures, chest XR. An ultrasound / CT should only be ordered after review by an experienced surgical registrar or by a consultant surgeon.

Once it has been decided to admit the child, they will be swabbed for COVID-19 if they have one of; fever, vomiting, diarrhoea or respiratory symptoms, understanding that they will remain in isolation until the PCR result is negative for COVID. The child will then be admitted under the relevant surgical consultant. The paediatrician on take will review the child on the first morning of their admission to ensure that no alternative diagnosis exists.

Review:

It is anticipated that this flowchart will continue to evolve over the coming weeks. Can any comments or issues with this pathway please be emailed to rory.obrien1@hse.ie

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* Cough, Sore Throat, Increased work of breathing / short of breath, new runny nose
 ** Vomiting or diarrhoea
 *** Options: a) Consultant Paediatrician will see on post-take ward round once on call paediatric registrar notified. b) paediatric registrar to review in ED or ladybird as requested by surgical registrar.