

INTRODUCTION

Intussusception is paediatric surgical emergency, and refers to the invagination of a part of the intestine into itself. It is the most common abdominal emergency in early childhood, however often misdiagnosed.

Ultrasound imaging is the gold standard for diagnosing intussusception. Early diagnosis allows for non operative reduction and omits the need for surgical intervention. We present a case of a child diagnosed with intussusception within minutes by utilising our personal devices and embracing the era of social technology.

CASE REPORT

A 3 year old boy presented to the emergency room with a history of intermittent abdominal pain for 4 days, with vomiting and no bowel movements for 1 day. Examination revealed stable vital signs, soft abdomen and appearing well. Bowel sounds were active with no other associated positive findings. Laboratory investigations were unremarkable. An abdominal x-ray was performed. A suspicious round opacity was noted at the right upper quadrant on the abdominal X-ray (figure 1) and subsequently an ultrasound was performed and the radiologist on call was teleconferenced in via smartphone, with the ultrasound image in view. Ultrasound revealed a 'target sign' over the abdomen (Figure 2). The case was then referred to the surgical team, who in turn successfully performed hydrostatic reduction. The child was admitted overnight for observation and discharged well the following day.



Figure 1 : abdominal xray



Figure 2: Ultrasound image Demonstrates classic target lesion



Kindly scan for USG video

DISCUSSION

Diagnosing intussusceptions based on clinical examination can be challenging but imaging aids in diagnosis. Ultrasonography is the method of choice to detect intussusception. A "bull's eye" is seen, representing layers of the intestine within the intestine. More than 20% of patients with intussusception had negative plain films but with ultrasound, it has a 97% sensitivity and specificity in the hands of an experienced sonographer. It is a well known fact that the ability to interpret images on an ultrasound depends on the capabilities of the operator. It is unreasonable to expect to have a radiologist in the emergency room around the clock, thus we use modern technology to bring the emergency room to the radiologist by using the virtual world to allow the radiologist report the findings from anywhere. In the case we report, a video was captured while teleconferencing the radiologist. This allows us to jump ahead to life saving procedures by embracing the digital era.

CONCLUSION

Innovation in POCUS training and education has surged as a prime focus for many global emergency care improvement efforts. Teleconferencing a radiologist with point-of-care ultrasound in emergency department leads to a quick evaluation and diagnosis, which is paramount to early treatment. In the current modern world governed by technology, a smartphone is at the ready in the hand of almost every individual. Thus, a video conference between the emergency room doctor and the radiologist is easily accessible and as in this case, results in the best outcome for the patient.

REFERENCES

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