

PTH-015

AXR IS THE MOST USEFUL INITIAL SCREENING TOOL IN DETERMINING POSITION OF 'RETAINED' PATENCY CAPSULE

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Introduction Capsule endoscopy carries a risk of capsule retention. In patients with risk factors for this, patency capsule (PC) is recommended. Patients are screened at 30 h with radiofrequency scanner, if scan positive (PC present) further imaging is required. This practice is to use AXR to determine PC position, then CT if any uncertainty. The use of scout CT has been advocated to identify the presence of PC in scan positive patients, then limited CT if PC is present. Limitations of this are access to and increased demand for CT. The authors propose that AXR remain the most appropriate screening tool to determine PC position and reduce the requirement for CT.

Aims To determine the frequency with which position of PC could be confidently identified on AXR by 3 consultant radiologists and requirements for CT scan.

Methods Of 181 PC's performed, 74 patients scanned positive. 3 consultant radiologists were asked to retrospectively review

Table 1 PTH-015

Score	R1		R2		R3	
	N with score 1–5 (%)	PC location on CT	N with score 1–5 (%)	PC location on CT	N with score 1–5 (%)	PC location on CT
1	44 (59%)	2-C	35 (47%)	3-C	43 (58%)	7-C
2	12 (16%)	11-C	23 (31%)	12-C	15 (20%)	7-C
				1-SB		1-SB
				1-anast.		1-anast.
3	12 (16%)	9-colon	10 (14%)	5-C	13 (18%)	7-C
		1-SB		2-SB		4-SB
		1-ICV		1-ICV		1-ICV
		1-anast.				
4	4 (5%)	4-SB	6 (8%)	2-C	2 (3%)	1-C
				3-SB		1-SB
				1-stomach		
5	2 (3%)	1-SB	0		1 (1%)	1-stomach
		1-stomach				

anast., anastomosis; C, colon; ICV, ileocaecal valve; R, radiologist; SB, small bowel.

the 74 AXR's performed in these patients and grade the position of the PC. Degree of certainty was assessed by the following scoring system: 1=certain in colon, 2=probably in colon, need CT, 3=position uncertain, need CT, 4=probably not in colon, need CT, 5=definitely not in colon.

Results In an average of 55% of cases, the radiologist could report with certainty that the PC was in the colon, negating the need for CT. Of these, all but two patients went on to successful video capsule endoscopy (VCE); one patient retained VCE (no CT done), two patient VCE was not done (other reasons). In one patient PC was confidently located in the small bowel; and the patient had successful VCE. In 45% of cases the radiologist was not confident of PC position and recommended CT. This was a retrospective study, therefore discrepancies exist between study recommendations and actual events.

Conclusion A radiologist can confidently locate the PC on AXR in 55% cases. This data suggests that only 45% of scan positive patients will require CT to identify the location of PC after AXR. This has a beneficial impact in reduction of demand for CT and less radiation exposure for patients. The authors believe an AXR remains a useful and reliable initial screening tool in determining the position of PC in scan positive patients and would recommend its use over scout CT.

Competing interests None.

Keywords abdominal x-ray, patency capsule.