

DO ESGE PERFORMANCE MEASURES FOR SMALL BOWEL CAPSULE ENDOSCOPY IMPACT ON SIGNIFICANT CLINICAL OUTCOMES IN OBSCURE GI BLEEDING?

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INTRODUCTION

The European Society of Gastrointestinal Endoscopy (ESGE) identified the need to benchmark the quality of small bowel capsule endoscopy (SBCE) and produced a set of performance measures (PM).

Aim: Evaluate which PM were closely aligned with relevant patient outcomes in occult and overt obscure GI bleeding (OGIB).

METHODS

Longitudinal retrospective study including sequential SBCE for OGIB performed between January 2017 and June 2020. Data on the 10 PM (6 key, 4 minor) and clinical outcomes were collected. Relevant outcomes were defined as rebleeding or need for transfusion/IV iron after SBCE. Relevant findings were defined as Saurin P1/P2 lesions.

RESULTS

175 SBCE (59 overt OGIB, 116 occult OGIB) were included, 50% male, mean age of 71.9±10.5 years-old.

- **Lesion detection rate:** the global diagnostic yield was 72% (78% in overt OGIB; 68% in occult OGIB). 123 patients presented relevant findings, however only Saurin P2 (67%) findings were associated with rebleeding and need for transfusion/IV iron
- **Timing in GI bleeding:** Patients with SBCE performed within 14 days (68%) had a higher need for transfusions/IV iron but no significantly higher rebleeding rate
- **Appropriate referral for device assisted enteroscopy (DAE):** Rebleeding or need for transfusion/IV iron were not significantly higher in patients adequately referred for DAE according to ESGE recommendations

Table 1 – PM analysis for overt and occult obscure GI bleeding

Performance measures	% (n)	Outcomes					
		Rebleed	No rebleed	p	Transf/IV iron	No transf/IV iron	p
Indication for SBCE	100 (175)	n/a	n/a	n/a	n/a	n/a	n/a
Cecal visualization	91 (159)	93%	91%	.94	92%	91%	.98
Lesion detection rate	72 (123)	93%	69%	.02	75%	71%	.70
- Saurin P2 lesions	-	25%	8%	.003	49%	30%	.02
Timing in GI bleeding	68 (40)	30%	21%	.68	58%	26%	.05
Appropriate referral for DAE	35 (22)	27%	22%	.87	50%	37%	.45
Capsule retention	0.6 (1)	n/a	n/a	n/a	n/a	n/a	n/a
Adequate bowel preparation	87 (152)	88%	95%	.40	91%	96%	.32
Patient selection	25 (4)	n/a	n/a	n/a	n/a	n/a	n/a
Use of standard terminology	94 (164)	89%	95%	.40	93%	95%	.55
Reading speed	0 (0)	n/a	n/a	n/a	n/a	n/a	n/a
> 80% 6 Key PM	-	21%	4%	.01	45%	26%	.03

n/a – not applicable

- If **> 80% of the 6 key PM** were achieved, there was a significantly higher rebleeding rate and need for transfusion/IV iron.
- **Complete small bowel visualization** was achieved in 91% and no association with relevant outcomes was found.
- **Capsule retention** or required additional intervention in 1 patient (0.6%).

CONCLUSIONS

When the majority of ESGE PM were achieved, patient outcomes were significantly worse. “Lesion detection rate” and “Timing of SBCE” in overt OGIB were the PM that had a higher impact on relevant outcomes.

These results emphasize the importance of complying with proposed PM and may reflect adequate selection of patient for SBCE and subsequent appropriate management according to clinical severity.

REFERENCES