International survey on opinions and use of minimally invasive surgery for small bowel neuroendocrine neoplasms

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on behalf of the **International Study Group of Small bowel neuroendocrine neoplasm Surgery (ISGSS)**

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Introduction

- Minimally invasive surgery is common in abdominal surgery, but implementation for small bowel NEN (SB-NEN) is lagging behind.
- Aim: gain insights into attitudes towards minimally invasive surgery for resection of SB-NEN and current practices.

Methods

- Anonymous online survey
- Sent to surgeons between February and May 2021
- Topics:
  - Background
  - Preferences
  - Opinions
  - Contraindications
  - Training/education

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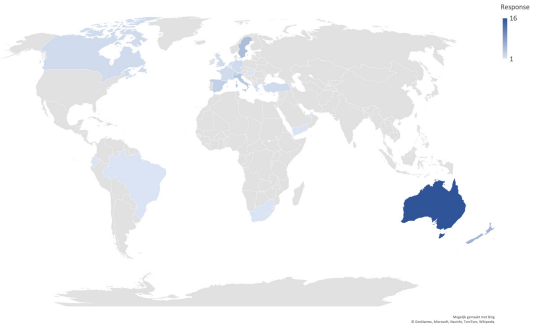
Results

- 58 responses, 5 societies, 20 countries
- Background:
  - Colorectal: 64%
  - Endocrine 41%
  - Experience in advanced minimally invasive surgery: 10 (5-15) years
- Preferences:
  - Open: 42%, lymphadenectomy, tactile feedback
  - Minimally invasive: 58%, length of stay, pain after surgery, time to recovery
  - Specific training in advanced minimally invasive surgery: 61%
  - MDT assessment: 58%
  - Future value of minimally invasive surgery higher than open: 58%
- Contraindications
  - Incomplete resection: 67%
  - Vascular involvement: 52-55%
  - pN2 lymph nodes: 47%
  - Multifocal: 43%
- Training/educations:
  - Additional training: 52%
  - Preference for video: 60%

Conclusion

- 69% applies minimally invasive surgery for resection of SB-NEN.
- Arguments for specific operative approaches differ, and insufficient training in advanced laparoscopic techniques seems to be a barrier.
- Future collaborative studies can provide better insight in selection criteria and optimal technique.



Characteristics, no. (%)	Total (N = 58)	Academic hospitals (N = 41)	Experience in advanced MIS (N = 45)
Background			
Performs MI SB-NEN resection	40 (69)	27 (66)	38 (84)
MI SB-NEN resections per year, mean (SD)	4 (3)	4 (2)	3 (3)
Technique: laparoscopic dissection, open bowel transection	25/40 (63)	12/27 (44)	24/38 (63)
Opinions			
Patients without pN2 lymph node metastases are amenable for MIS	39/51 (76)	26/35 (74)	35/42 (83)
Guidelines should give clear criteria for patients selection in MIS	31/55 (56)	18/28 (64)	24/37 (65)
Patients with distal lymph nodes, without encasement of mesenteric vessels are amenable for MIS	42/55 (76)	27/38 (71)	34/43 (79)
In general, patients benefit from MIS when performed by an experienced surgeon	44/51 (86)	27/34 (79)	37/41 (90)