

## Rectal NET treatment – current approach

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The estimated incidence of rectal neuroendocrine tumours (NET) is 1.04 per 100,000 people although the real incidence may be higher. Recent epidemiological studies report higher incidence of rectal NETs in Asia comparing to Europe or North America [1, 2]. Most NETs are asymptomatic neoplasms diagnosed in screening colonoscopy, which could be one of the reasons for the increasing occurrence. Less than 1% of rectal NETs produce serotonin; this explains why there is no manifestation of carcinoid syndrome. In cases of NET located in the rectum, the size of the tumour is strictly associated with its behaviour. The risk of metastases increases with the lesions' diameter [3, 4].

The current guidelines established by the European (ENETS) and North American (NANETS) Neuroendocrine Tumor Societies show detailed treatment algorithms that support the decision-making process following the diagnosis. The most important criteria for therapy are tumour size and the histopathological risk factors for metastases. For well-differentiated rectal neuroendocrine neoplasms <1 cm, local endoscopic or surgical excision is recommended. Endoscopic resection is sufficient in most cases: conventional polypectomy or endoscopic mucosal resection (EMR) for smaller lesions or endoscopic submucosal resection with a ligation device (ESMR-L), cap-assisted EMR (EMR-C) and endoscopic submucosal dissection (ESD) [5].

Rectal NETs with a tumour diameter greater than 2 cm show a very high frequency of lymph node metastasis (58–76%), and therefore these tumours are indications for rectal resection plus lymph node dissection. Either low anterior resection with total mesorectal excision (TME) or abdominoperineal resection are possible treatment options (APR) [6, 7]. Moreover, recent studies show that the resection of the primary tumour

may lead to the prolonged survival of patients with GI-NETs associated with metastases [8].

Zubaryev et al. in the article *Local excision vs. radical surgery in treating rectal nets considering the biology of neuroendocrine tumors (NETs)* raised a very important subject [9]. Due to the lack of evidence, tumours sized 1–2 cm represent a grey area for prognosis and treatment. It is crucial to apply the right therapy for this group of patients. Choosing the right treatment might be a challenge in these cases. We need to determine when minimally invasive treatment with endoscopy or TEM is sufficient. We should be careful while considering radical surgery, particularly when there are no clear indications after we have performed tumour staging. Surgeons should always have in mind the potential risks associated with colorectal surgery. There is no doubt that radical surgical treatment such as APR is mutilating by definition. But even laparoscopic rectal resections may carry significant risk. The most frequent postoperative surgical complications after colorectal resections are surgical site infections, anastomotic leakages, intra-abdominal abscesses, ileus and bleeding. What is more, between 25 and 80% of patients undergoing low or very low anterior resections suffer postoperatively. There are a plethora of long-term postoperative complications including faecal urgency, frequent bowel movements, bowel fragmentation and incontinence, collectively referred to as low anterior resection syndrome (LARS) [10].

In order to avoid potential trauma related to surgical treatment, we should consider treatments which are as minimally invasive as possible, while, at the same time we should also have oncological indications on our mind.

We should appreciate that the authors have tried to determine independent factors helping clinicians to make the

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right choice of therapy to reach a satisfactory oncological outcome. The impact of invasion's depth of primary NETs has been confirmed to be the most important factor before planning treatment strategy. The authors also deserve praise for including a large group of patients in the study.

According to the current state of knowledge, regarding tumours with a diameter of 1–2 cm, the guidelines recommend local resection if neither muscularis propria invasion nor lymph node metastasis is suspected. The reported predictors of lymph node metastasis for rectal NETs present the following characteristics: tumour diameter >1 cm, ulcerations, presence of vascular invasion. It therefore seems that patients with tumour diameters of 1 cm or smaller and muscularis propria invasion or without suspicion of lymph node metastasis should undergo local minimally invasive resection. If a histopathological report reveals vascular/muscularis propria invasion, positive surgical margins, then rectal resection with TME should be introduced [11].

We agree with the authors' conclusions. It is certain that more prospective randomised studies are required to discover other prognostic factors regarding rectal NETs that might have an influence on treatment strategies. However, they may be challenging to conduct due to the limited number of cases, the relatively large sample size and the long-term follow-up period needed.

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