

June 30, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (Transanal endoscopic surgery in rectal cancer-rev-NO 5772.doc).

Title: Transanal endoscopic surgery in rectal cancer

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 5772

The manuscript has been revised in accordance with the reviewers' suggestions:

1 The format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1)

1. In the Abstract "degree" of LN invasion has no sense, please change it into "RISK" or "RATE"

We have changed this to "risk".

2. In general "two" types of disease is a strange point of view. Invasiveness is a progressive characteristic of this tumour that reveals through the different risk factors for node metastasis.

In accordance with Tytherleigh, we wanted to stress the importance of progressive invasion through the submucosa as a risk factor for node metastasis, and also highlight the role of surgical factors

3. "sm" is the major factor to determine potential risk of LN invasion, so that even in absence of other risk factors "sm" 2 or even 3 is sufficient to indicate radical surgery

We agree with the reviewer. The Kikuchi classification defines Sm1 and Sm3 very well, but for Sm2 the range is very wide. We have introduced the following sentence in the text: "in the absence of other risk factors Sm 3 is sufficient to indicate radical surgery".

4. TEM Wolf is now available also in 7 cm length

The TEM equipment offered by Richard Wolf is listed on the firm's website:

http://www.richardwolfusa.com/fileadmin/images/content/USA_data/PDF_documents/General_Surgery/TEM_Instrumentation_Brochure.pdf

The TEM rectoscopes include:

Rectoscope Tubes

120 mm long, 40 mm OD, oblique edge

Includes tube 8840.025,

and obturator 8840.027

.....
8840.021

137 mm long, 40 mm OD, flat edge

Includes tube 8840.031

and obturator 8840.027

8840.311

200 mm long, 40 mm OD, oblique edge

Includes tube 8840.045

and obturator 8840.047

To my knowledge there is no rectoscope measuring 7 cm

5. please indicate also costs of TAMIS, including not only the single port device but also the costs of the necessary instrumentation such as Ultracision or Ligasure devices and Endostitch to facilitate suture, i.e. about 1k USD or EURO per case of disposable material, according to Atallah.

We have now introduced an economic study comparing TEM / TEO / TAMIS, based on the following assumptions:

- The economic aspects are analysed annually (estimating 50 surgical interventions (SI) per year and a useful life of the non-expendable material of 5 years), divided into variable and fixed costs.
- The variable annual costs are determined by applying the equation:
 - (1) n° annual surgeries \times (surgical time + hospital stay + consumable material). Consumable material: Ultracision scalpel, single port, sutures
- The annual fixed costs are determined by applying the equation:
 - (2) non-expendable equipment / time of useful life
- The annual cost for each technique is given by the equation:
 - (3) annual fixed costs + annual variable costs
- the estimated cost of the use of the operating theatre is 10 €/min and the cost of hospitalization in a conventional ward is 220 €/day.

- The variable annual costs calculated are (equation (1)):
 - TEO: 93,000 €/year [$50 \text{ SI} \times (700 \text{ €/SI} + 660 \text{ €/SI} + 500 \text{ €/SI})$]
 - TEM: 104,500 €/year [$50 \text{ SI} \times (830 \text{ €/SI} + 660 \text{ €/SI} + 600 \text{ €/SI})$]
 - TAMIS: 111,000 €/year [$50 \text{ SI} \times (760 \text{ €/SI} + 660 \text{ €/SI} + 800 \text{ €/SI})$]
- The fixed annual costs calculated are (equation (2)):
 - TEO: 3,000 €/year [$15,000 \text{ €} / 5 \text{ years}$]
 - TEM: 11,000 €/year [$55,000 \text{ €} / 5 \text{ years}$]
 - TAMIS: 0 €/year
- The total annual costs calculated for each technique are (equation (3)):
 - TEO: 96,000 €/year [$93,000 \text{ €/year} + 3,000 \text{ €/year}$]
 - TEM: 115,500 €/year [$104,500 \text{ €/year} + 11,000 \text{ €/year}$]
 - TAMIS: 111,000 €/year

Mean cost for TEO: 1,920 €

Mean cost for TEM: 2,310 €

Mean cost for TAMIS: 2,220 €

6. the paragraph about TEM/TEO/TAMIS should go before Technical Limitations of TEM

We have changed the order as requested.

(2)

The paper is a presentation of the pathological, diagnostic and therapeutic characteristics of the rectal cancer in the perspective of the therapeutic approach. The Authors underline the role of the transanal endoscopic microsurgery (TEM) with evidence of the correct therapeutic indications comprising preoperative and postoperative chemoradiotherapy. The study is well conducted with numerous, recent and complete references and on the whole the paper is a nice reading. The paper doesn't report the personal experience in a scientific way but only a few reference to previous papers of the same Authors. This manuscript can be evaluated such as a general communication on the role of the TEM. In conclusion it may be a chapter of a book but not a scientific paper. Therefore I think that this paper can't be published on a scientific journal as WJG.

We have introduced references to recently published studies by our group which reflect the authors' experience:

- **Serra Aracil X**, Mora-Lopez L, Alcantara-Moral M, Corredera-Cantarín C, Gomez-Diaz C, Navarro-Soto S. Atypical indication for transanal endoscopic microsurgery to avoid major surgery. *Tech Coloproctol.* 2014;18:157-64. [DOI 10.1007/s10151-013-1040-9. PMID: 23813055].
- **Serra-Aracil X**, Mora-Lopez L, Alcantara-Moral M, Caro-Tarrago A, Navarro-Soto S. Transanal endoscopic microsurgery with 3-D (TEM) or high-definition 2-D transanal endoscopic operation (TEO) for rectal tumors. A prospective, randomized clinical trial. *Int J Colorectal Dis.* 2014;29:605-10. [doi: 10.1007/s00384-014-1849-3. Epub 2014 Mar 28. PMID: 24676506]
- **Serra-Aracil X**, Caro-Tarrago A, Mora-López L, Casalots A, Rebasa P, Navarro-Soto S. Transanal Endoscopic Surgery With Total Wall Excision Is Required With Rectal Adenomas due to the High Frequency of Adenocarcinoma. *Dis Colon Rectum.* 2014;57:823-9. [doi: 10.1097/DCR.000000000000139. PMID: 24901682].

These articles draw on the authors' experience in transanal endoscopic surgery after close to 500 procedures.

In all, the article includes seven references by the authors

(3)

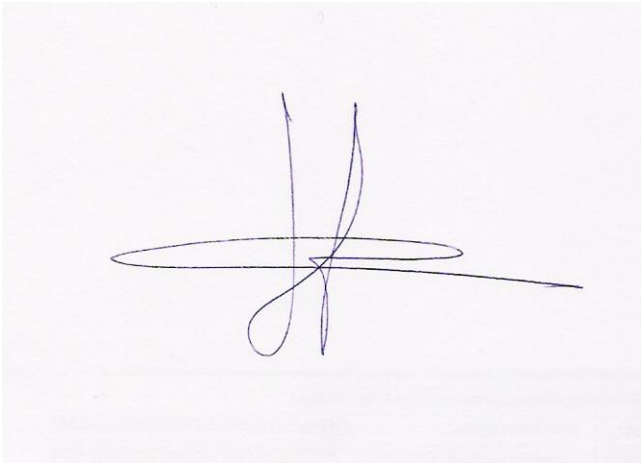
A good overview of technical aspects and oncological prognosis in different indications of transanal endoscopic microsurgery (TEM) for rectal tumors.

No comments

3 References and typesetting have been corrected

Thank you again for accepting our manuscript for publication in *World Journal of Gastroenterology*.

Sincerely yours,



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