

NENs of the Appendix- Is Right Hemicolectomy Needed?

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NEN of the Appendix

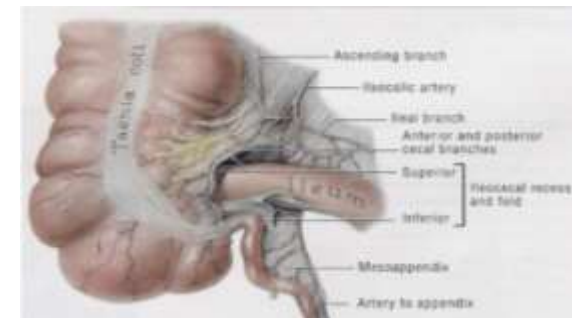
The patient

- 34 years old
- Appendectomy last month
- Yesterday, surgical clinic visit
- “ you have a tumor in the appendix, a neuroendocrine tumor of 2 cm, you must have another surgery to resect larger part of the colon and the lymph nodes”
- What to do now??

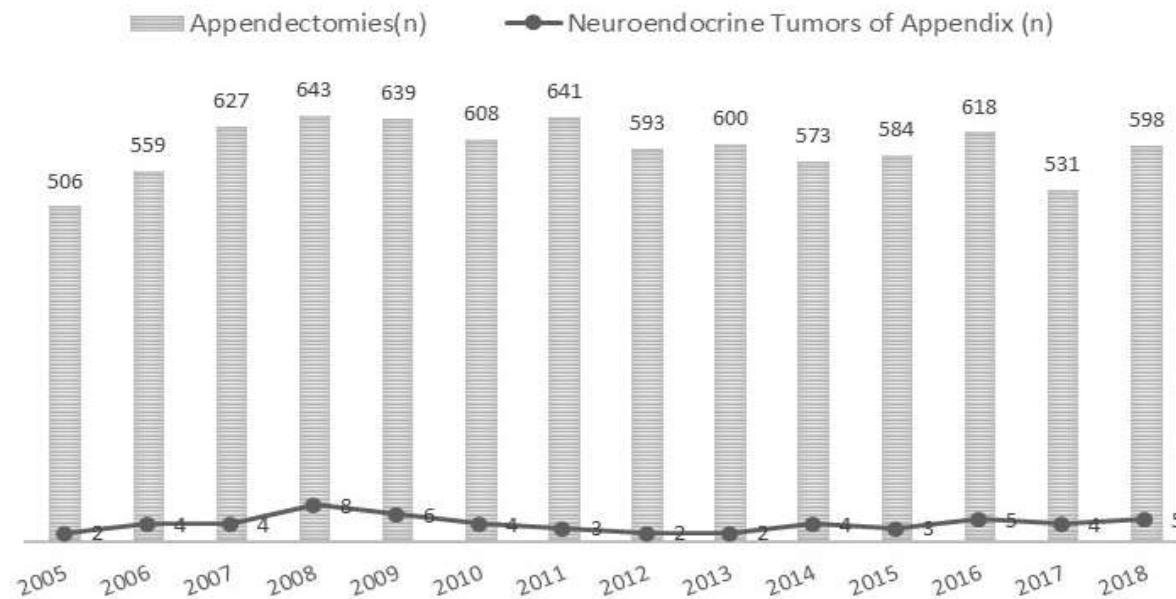


What is NEN of the Appendix?

- Tumor originating from the appendix
- Usually found incidentally at appendectomy
- Female: male= 70:30
- May appear at any age (8-80 years)
- Prognosis is excellent
- Hormone secretion is extremely rare



NEN of the Appendix Incidence



Twito et al, 2020

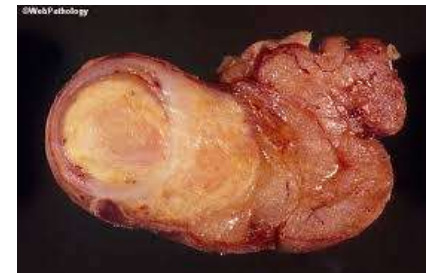
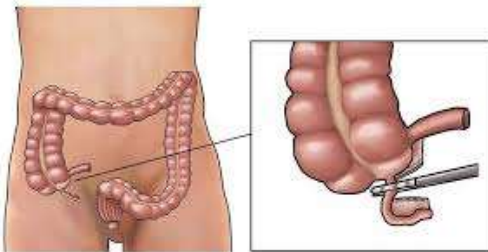
- 1-5/ 1,000,000 persons per year
- approximately 1/200 appendectomies

NEN of the Appendix Treatment

- Most of ANEN are localized to the appendix
- Appendectomy is curative in majority of patients

However...

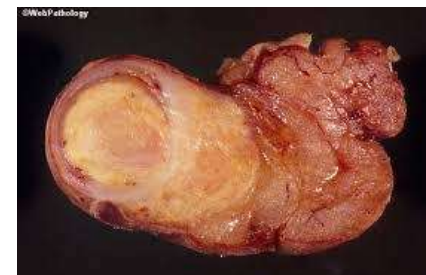
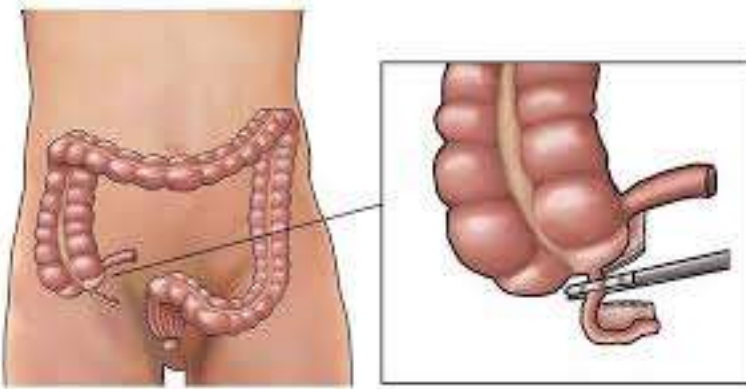
- A portion of patients develop lymph node metastases (5-30%?) or distant metastases (4-10%??)



NEN of the Appendix Treatment

CLINICAL DILLEMAS:

- HOW TO IDENTIFY PATIENTS WITH METASTATIC DISEASE?
- CAN WE PREVENT THE DEVELOPMENT OF METASTATIC DISEASE? (medical treatment, surgery)



NEN of the Appendix Treatment

HOW TO IDENTIFY PATIENTS WITH METASTATIC DISEASE?

- Imaging studies (CT, MRI, PET)
- Biochemical markers (blood, urine)
- Risk stratification
 - ✓ Tumor size > 2cm
 - ✓ Special subtypes (e.g. goblet cell carcinoid)
 - ✓ Tumor invasion
 - ✓ Unclear surgical margins

NEN of the Appendix International guidelines

Neuro
endocrinology

ENETS Consensus Guidelines

Neuroendocrinology 2012;95:135–156
DOI: [10.1159/000335629](https://doi.org/10.1159/000335629)

Published online February 15, 2012

NAN

ENETS Consensus Guidelines for the Management of Patients with Neuroendocrine Neoplasms from the Jejunum-Ileum and the Appendix Including Goblet Cell Carcinomas

The NANETS Consensus
Management of

*Well-Differentiated Neuroendocrine Tumors of the Jejunum, Ileum,
Appendix, and Cecum*

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Right hemicolectomy is recommended for ANEN > 2cm or ANEN with high risk features

NEN of the Appendix- Is hemicolectomy needed?

Neuro
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The
Carc

Michail Ga

Challenging the Current Risk Factors of Appendiceal Neuroendocrine Neoplasms: Can They Accurately Predict Local Lymph Nodal Invasion? Results from a Large Case Series

Endo
https:

ME

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His

neoplasms: when to perform a right hemicolectomy? A systematic
review and meta-analysis

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Valentina Ambrosini^{2,3} · Davide Campana^{1,2} · Francesco Minni^{1,2} · Riccardo Casadei^{1,2}

NEN of the Appendix- Is hemicolectomy needed?

Pros

- Guidelines supporting hemicolectomy for high risk patients
- No long-term follow-up data for conservative treatment
- Hemicolectomy is a simple procedure

Cons

- criteria for hemicolectomy are questionable
- Long-term benefit of hemicolectomy is not clear
- Surgical procedure with possible significant complications

NEN of the Appendix- Is hemicolectomy needed?

SUMMARY

- NEN of the appendix are relatively rare
- Simple appendectomy is usually curative
- In rare cases , local or distant metastases appear
- Hemicolectomy is needed for “high risk” patients only
- Patient specific decision making by a NET expert

NEN of the Appendix

The patient

- 34 years old
- 2cm ANEN
- Imaging of the abdomen & pelvis
- Revision of the pathology specimen
- Shared decision making



NEN of the Appendix-
Is hemicolectomy needed?

THANK YOU

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