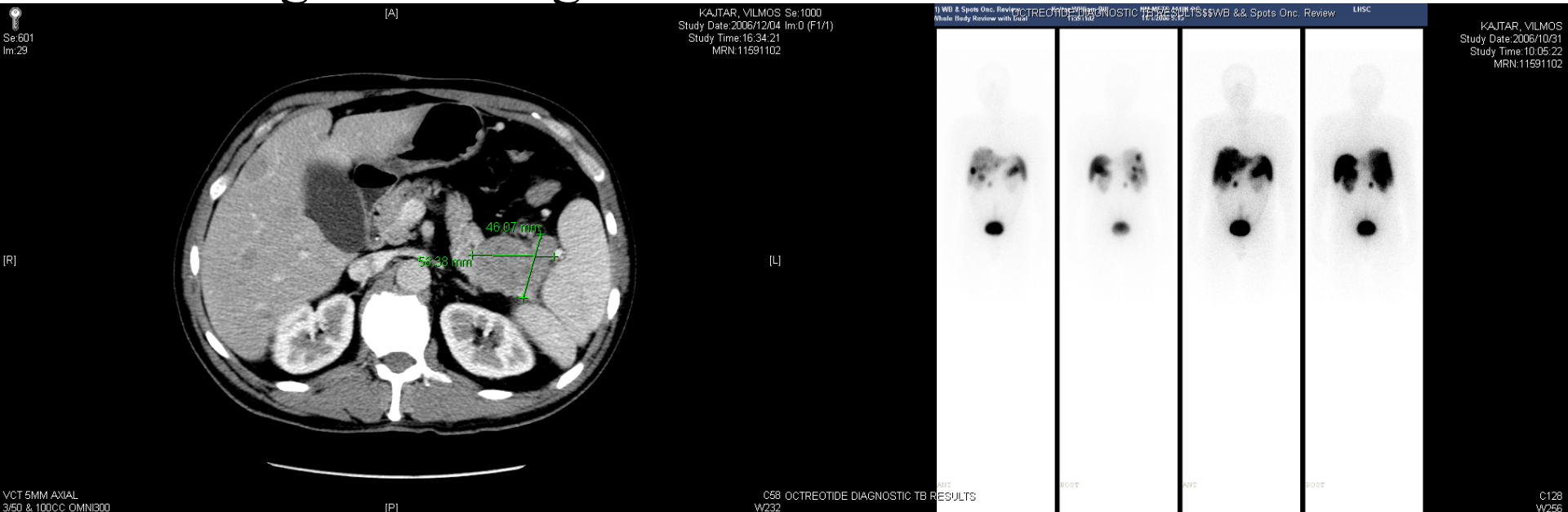


SURGERY FIRST!

Surgical Management of Intra-abdominal NETS



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Chairman Neuroendocrine Tumour Disease Site Team



The Division Of
**General
Surgery**

University of Western Ontario

Objectives

- Dispell old surgical “Dogma”
- What is the treatment for a primary of unknown origin.
- Categorize Surgical Procedures
- Surgical Requirements
- Patient based surgical examples

Dispelling Surgical Dogma

Dr. Norman Thompson

“New Thinking”



Dispelling Surgical Dogma

- “Carcinoid” tumours ARE NOT THE SAME as adenocarcinoma

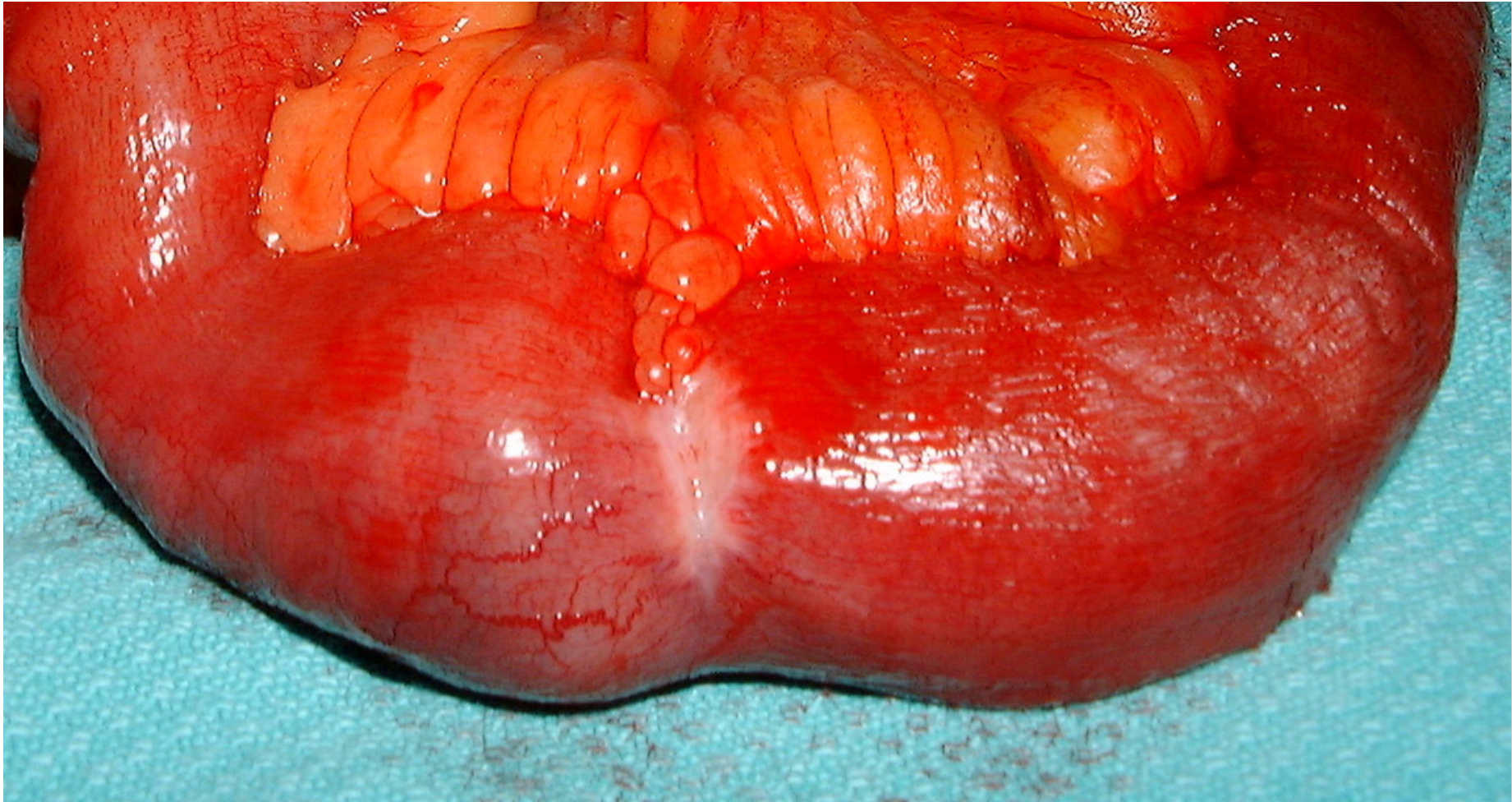
Case #1 P.U. K. O.

- 59 y.o. female
- Chronic abdominal for 4 years.
- CT scan found Metastatic liver disease May 2011
- FNAB G2 NET disease.
- Primary not found on CT, Octreotide, MIBG scans
- Medicated for abdominal pain with Hydromorphone, Dilaudid, Oxycocets.



Case #1

- Treatment including liver chemoembolization started.
- 18 months later presented at NET DST rounds
- Surgery option discussed
- Patient agrees



- Laparoscopic exploration and resection of small bowel NET performed. (o.r. time 35 minutes)
- G1 primary
- Patients 4 year abdominal pain gone.
- Goal directed therapy for Liver mets continues.

- Symptom Control
- Biochemical Control
- Tumour Control
- Quality of life improvement

- Surgical Management
 - Curative Surgery
 - Cytoreductive Surgery
 - Palliative Surgery
 - Liver Metastases
 - Liver Transplantation

Placebo-Controlled, Double-Blind, Prospective
Randomized Study of the Effect of Octreotide LAR in
the control of tumor growth in patients with Metastatic
Neuroendocrine Midgut Tumors:
A Report from the PROMID Study Group
Oct. 2009, JCO

- Most favorable treatment outcome in patients with
 - Hepatic tumor load $<10\%$ ($P<0.0009$)
 - Resected primary ($P<0.0104$)
- Benefit of octreotide LAR versus placebo seen irrespective of
 - Functioning or non-functioning NETs
 - Elevated or non-elevated CgA

- Complete removal of all Tumour
- Easy to do in small tumours
- Curative procedure possible with metastatic disease (local, regional, liver)

CASE #2

Se:2
Im:219

[A]

WIRN. 11007402

[R]

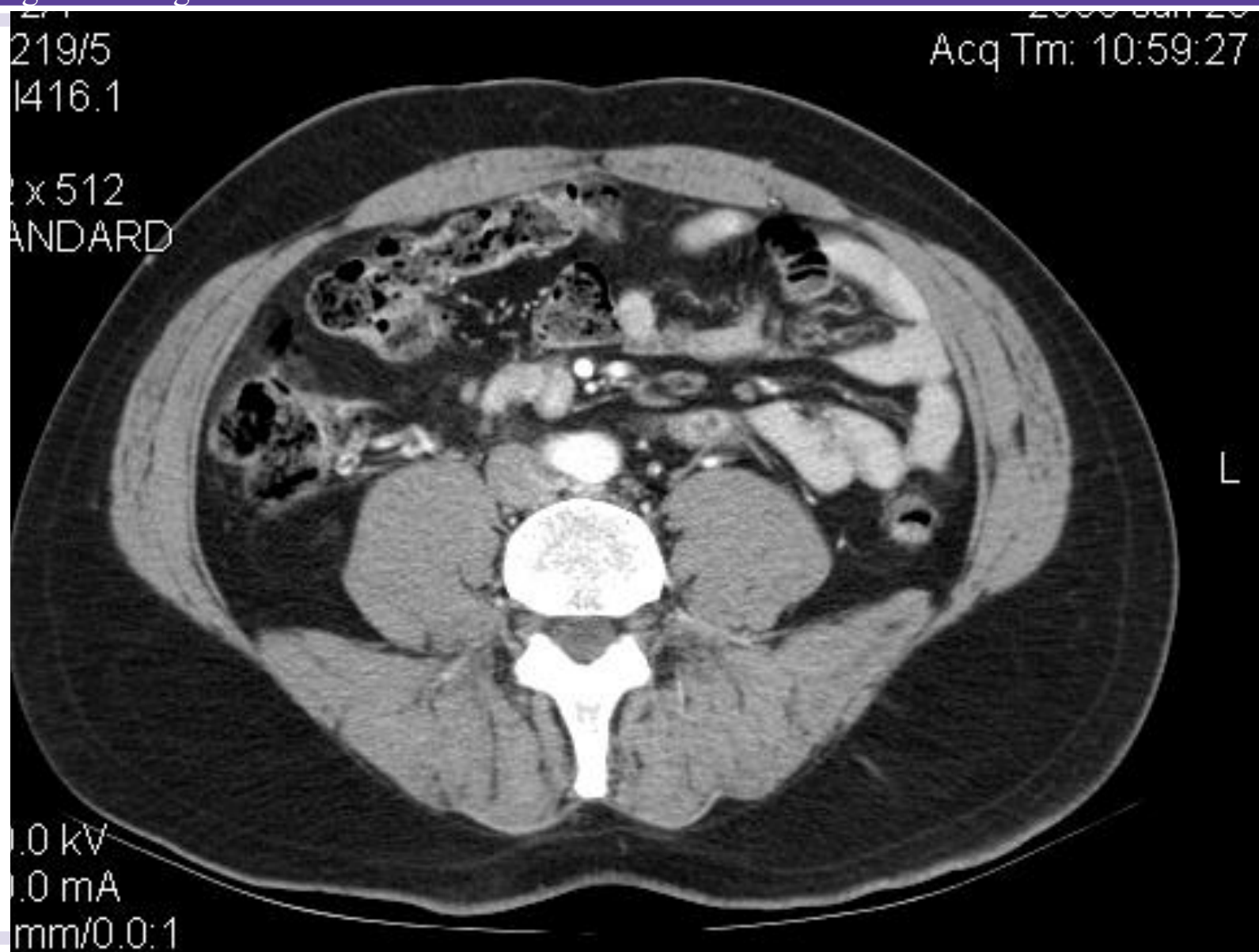


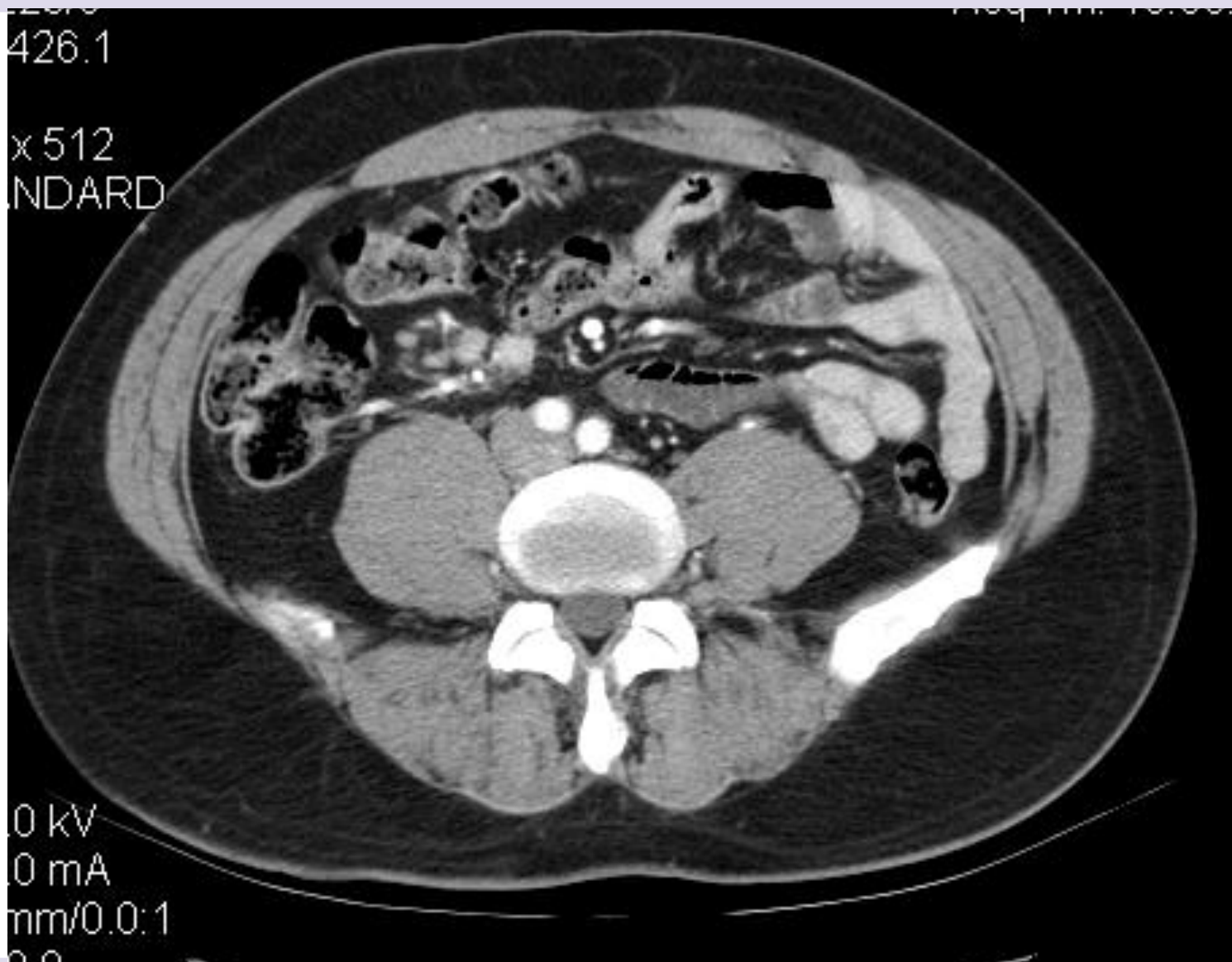
[L]

CHEST ABDO
H2O X 1 1/2 & 145ML OMNI350

[P]

C40
W400





Se:2
Im:221

[A]



[R]



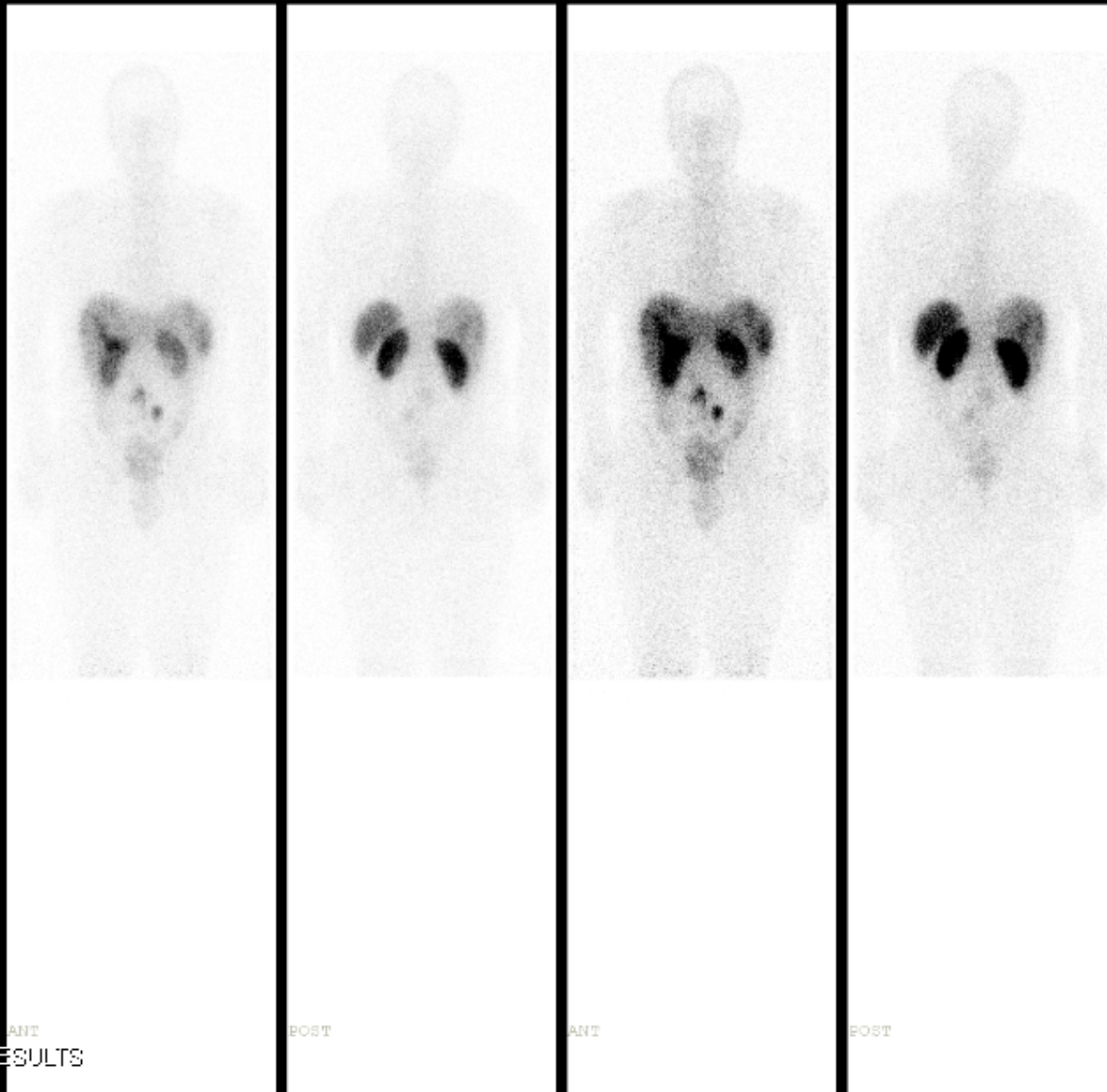
[L]

[P]

Se:1000
Im:0 (F1/1)

1) WB & Spots Onc. Review
Whole Body Review with Dual
111 INDIUM DIAGNOSTIC WB RESULTS
WB & Spots Onc. Review

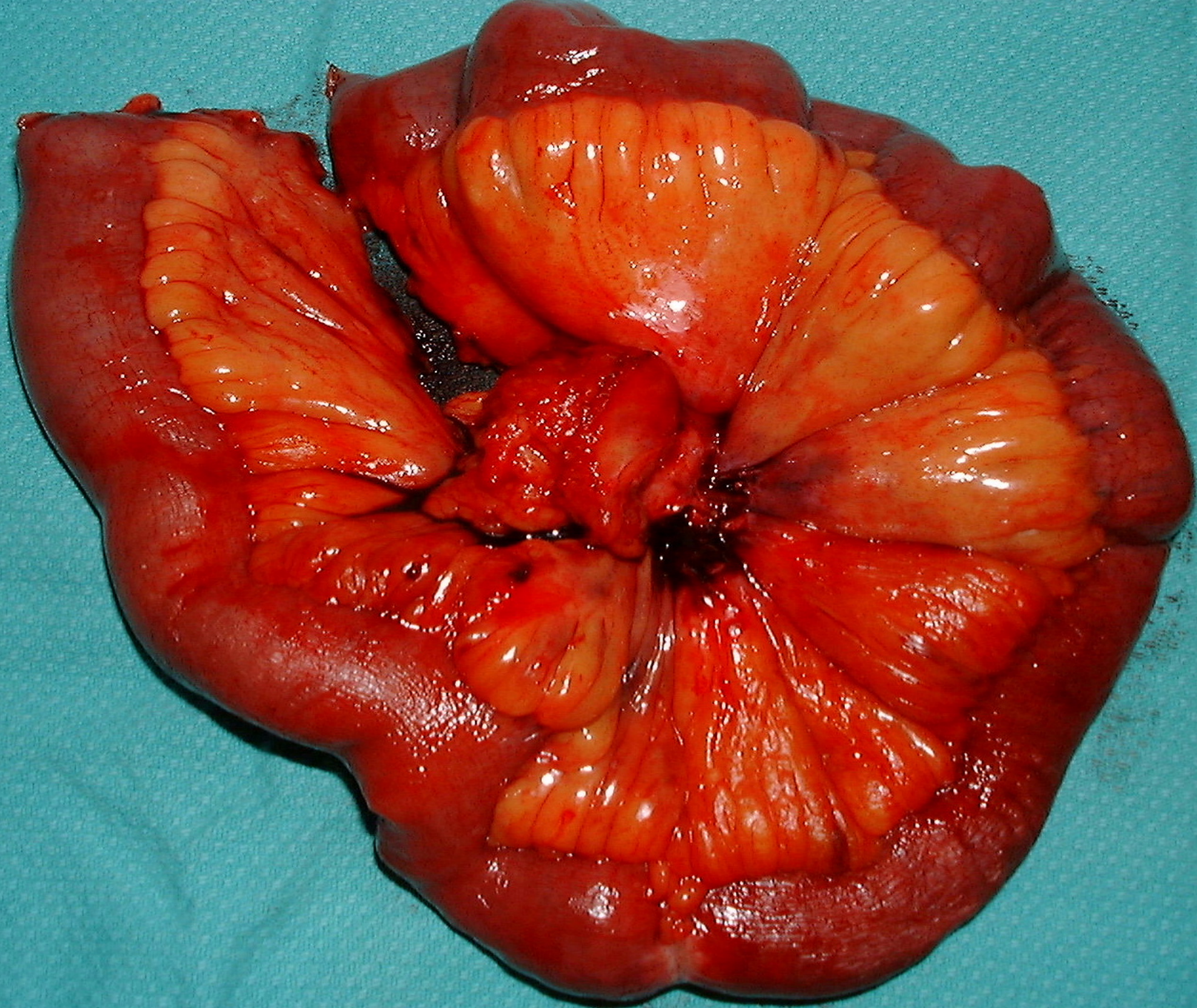
LHSC



MRN:11607402

111 INDIUM DIAGNOSTIC WB RESULTS

C128
W256

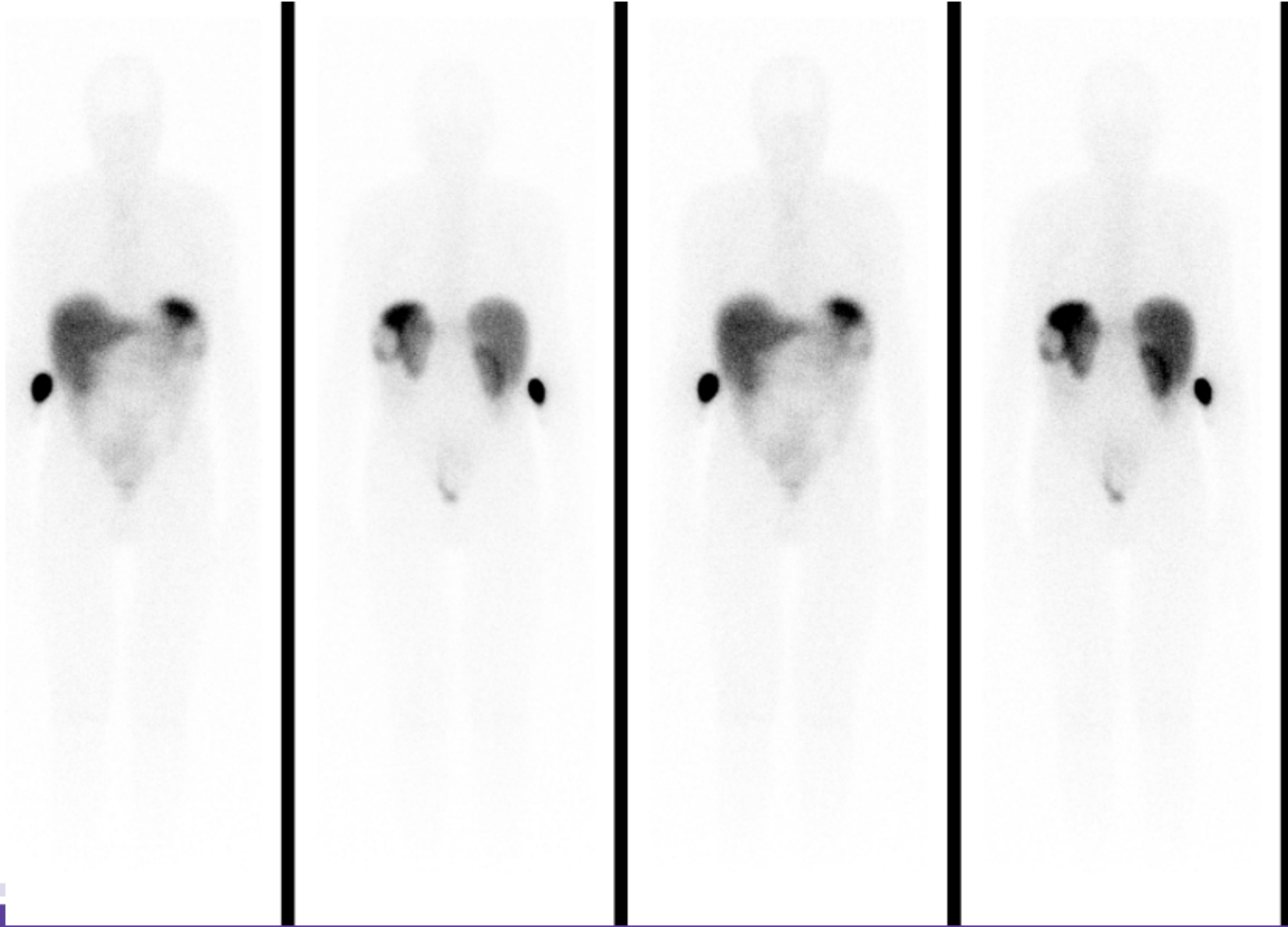






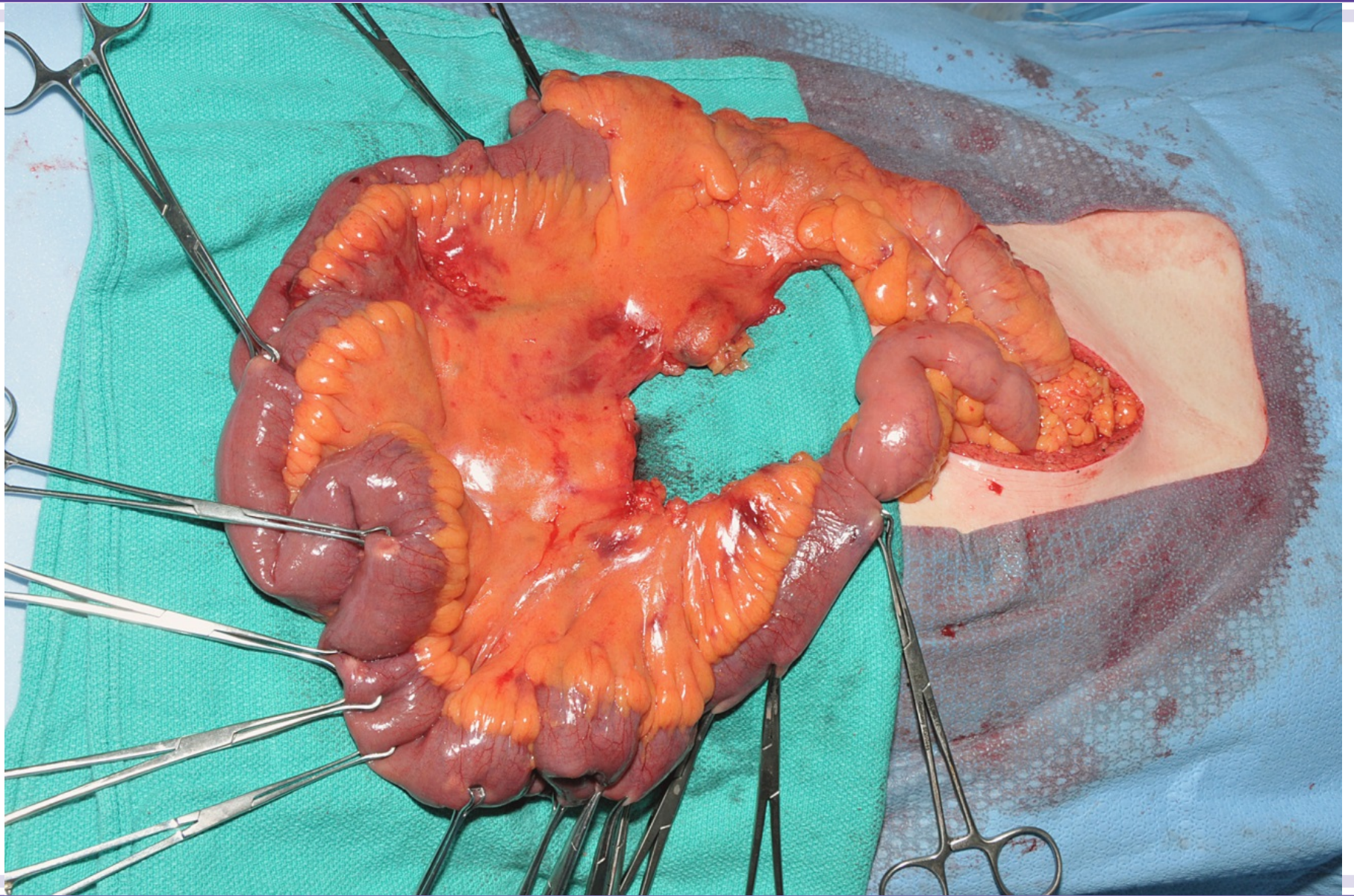
INCHES

PRECISION DYNAMICS

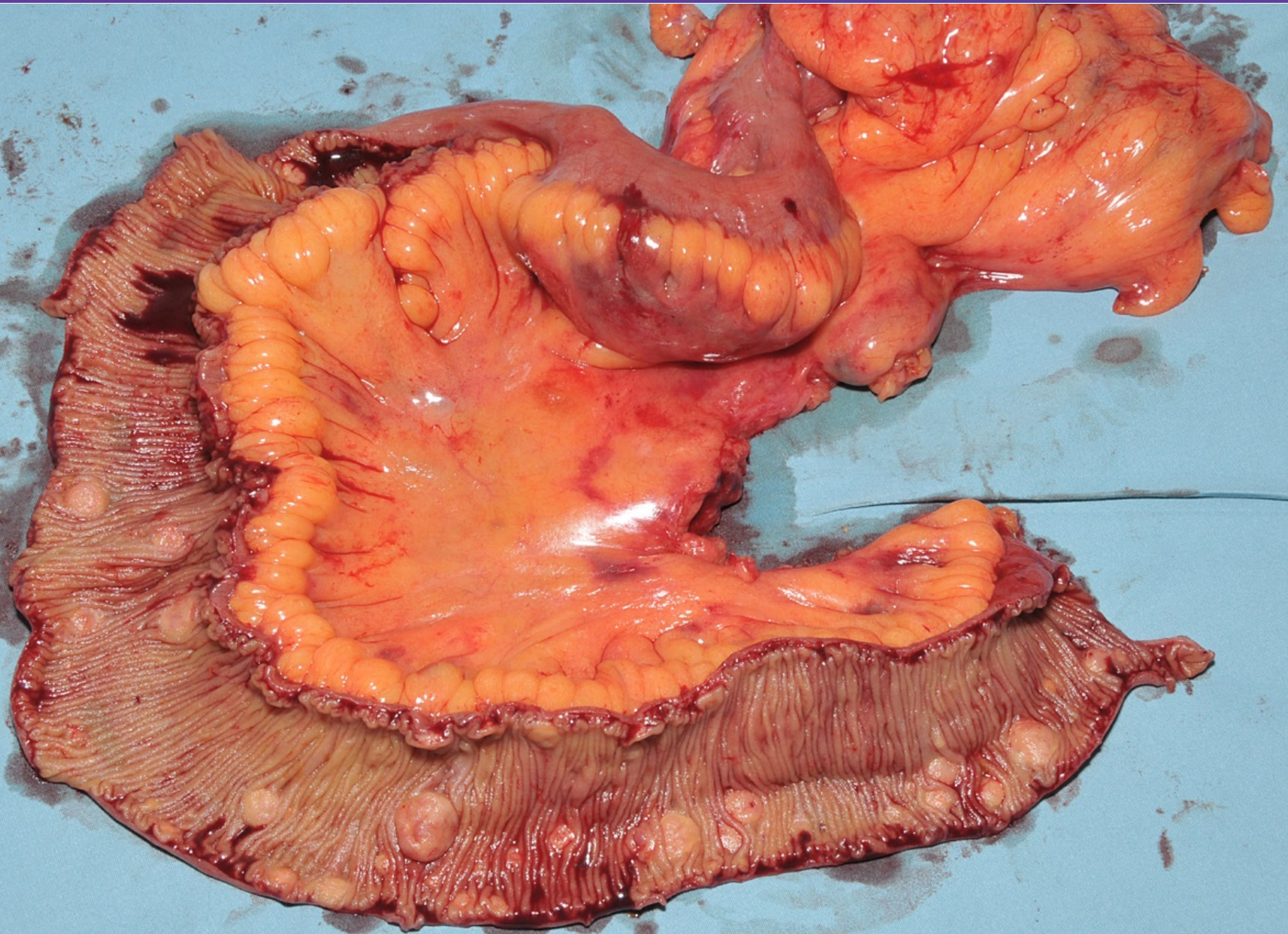


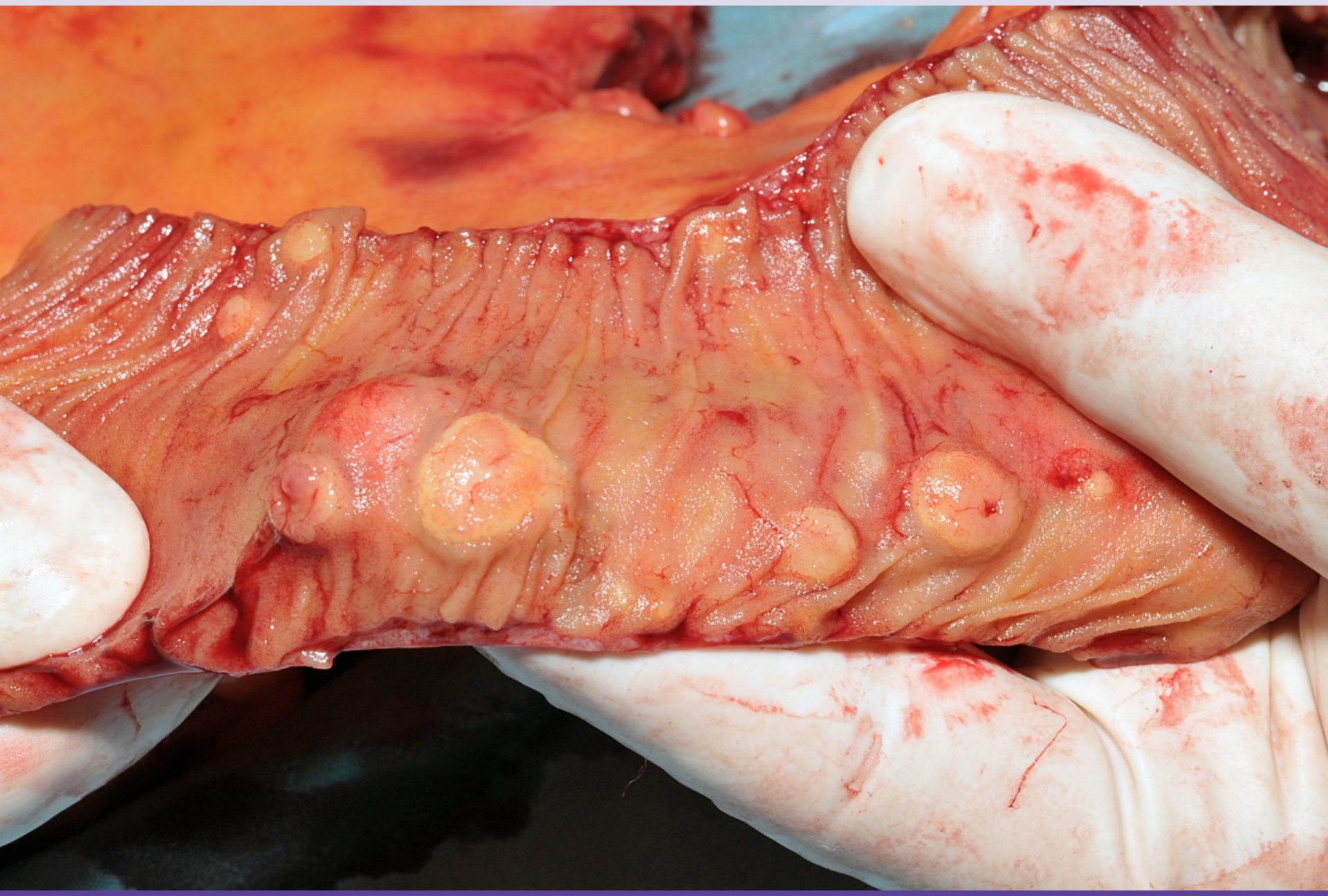
Survival Benefit to Resection of the Primary Tumour

- Careful examination of the entire small bowel is essential









- Surgery is the only way to obtain a cure
- Slow growth leads some surgeons to avoid surgery
- The most common cause of death is advanced mets
- Aim is to control symptoms and improve survival
- Small bowel obstruction is usually inevitable unless resected.
- Primary of unknown origin is probably small bowel

- Surgery most effective treatment for local tumour effects (obstruction, bleeding, perfs)
- Decreases secretory symptoms

- Survival benefit if the primary tumour is resectable
- Survival benefit when hepatic tumour load <10%
- Preoperative planning is Essential
- Expert surgical backup
- Think Surgery First!!