

An Aggressive Multi-disciplinary Approach to Advanced Neuroendocrine Tumors

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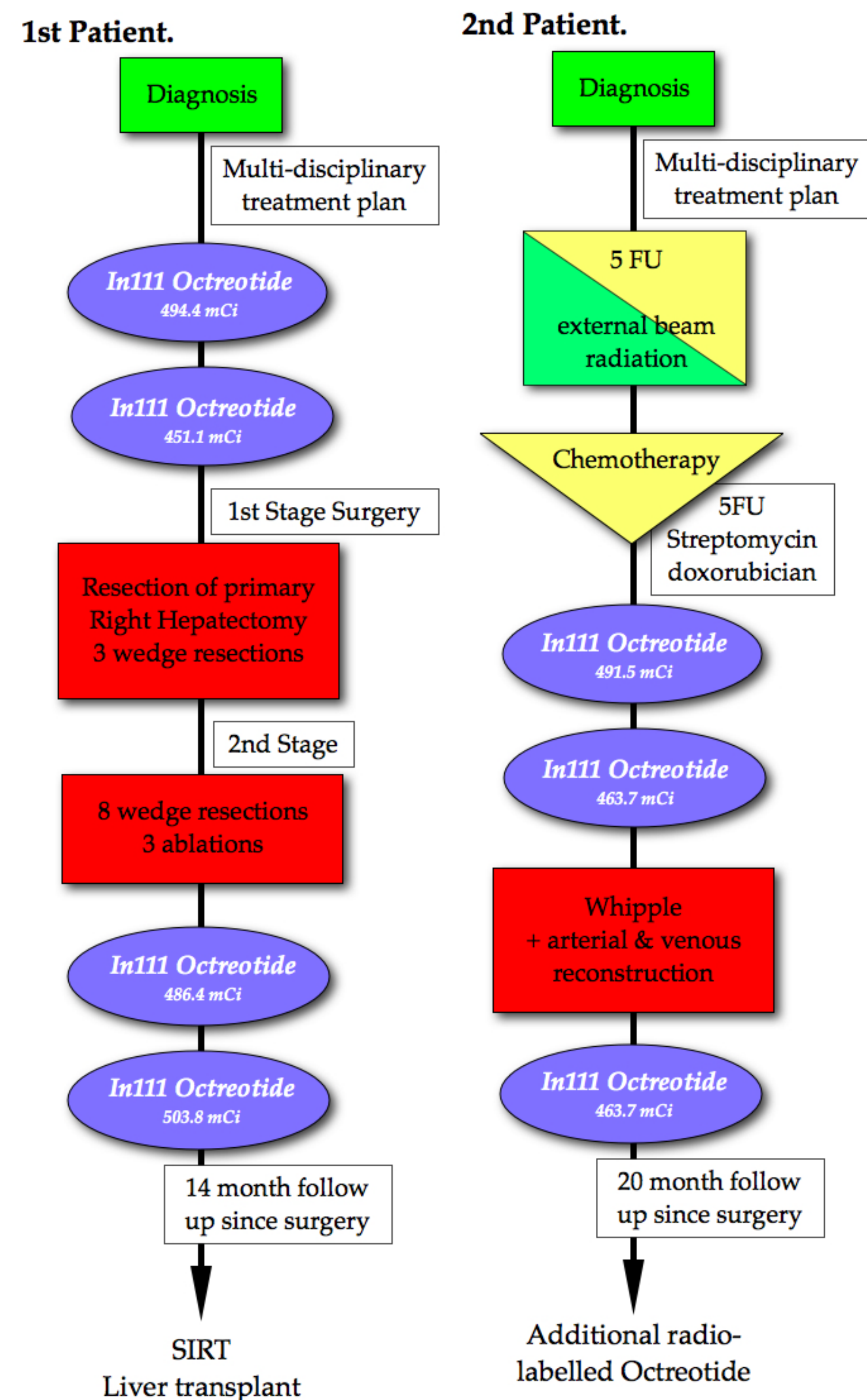
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Introduction

Neuroendocrine tumors continue to be a difficult to treat cancer with a less than 70% five year survival, with only minimal improvements in survival over the last few decades. A multi-disciplinary approach to advanced neuroendocrine tumors is essential.

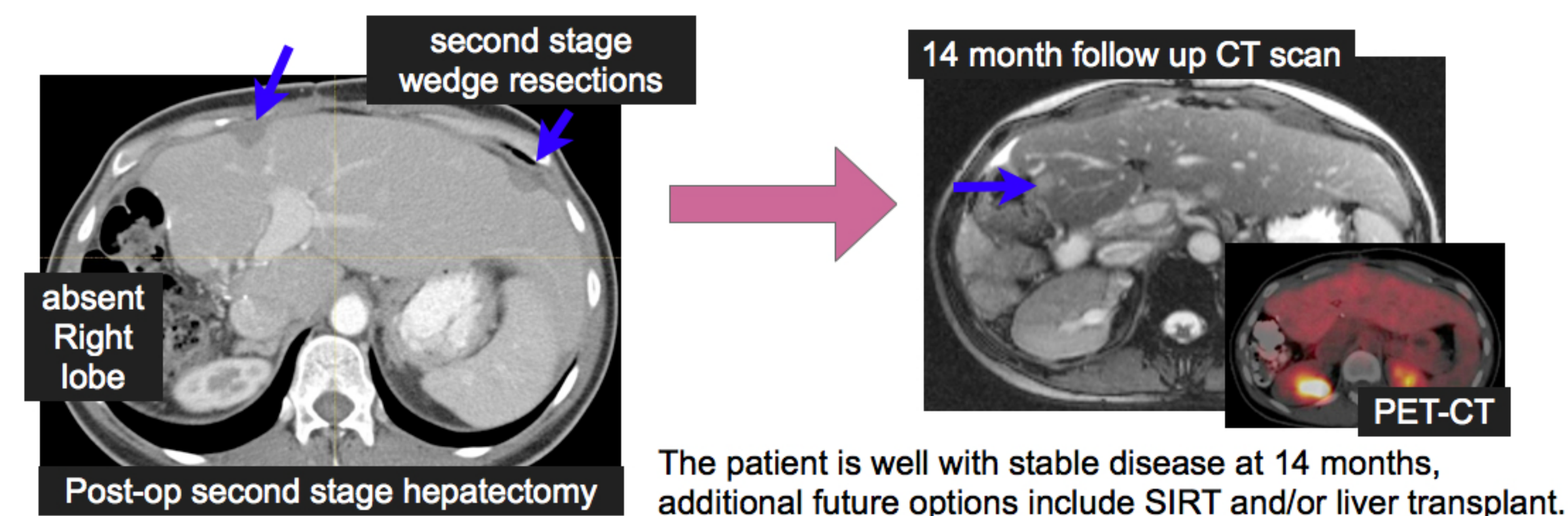
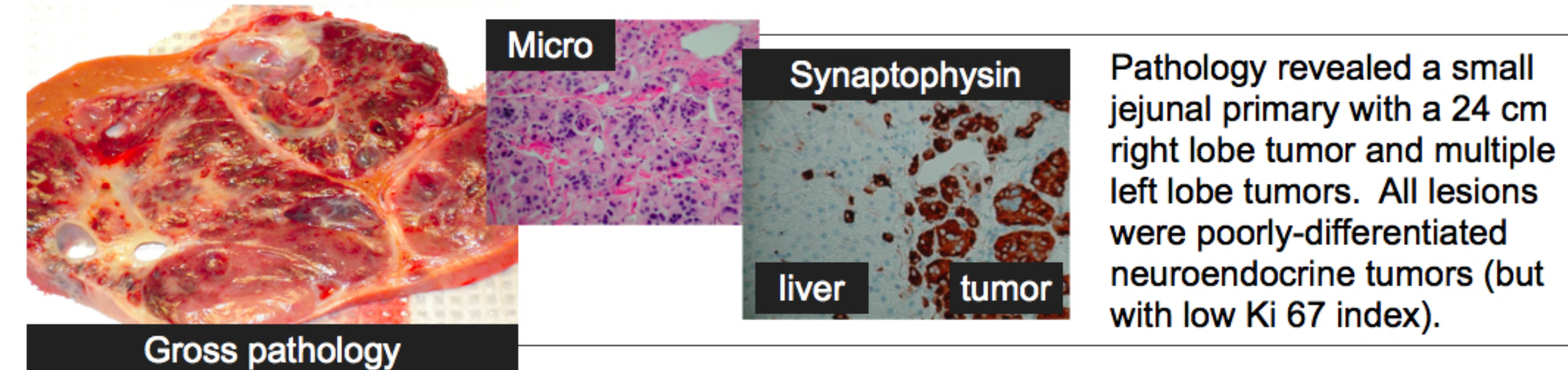
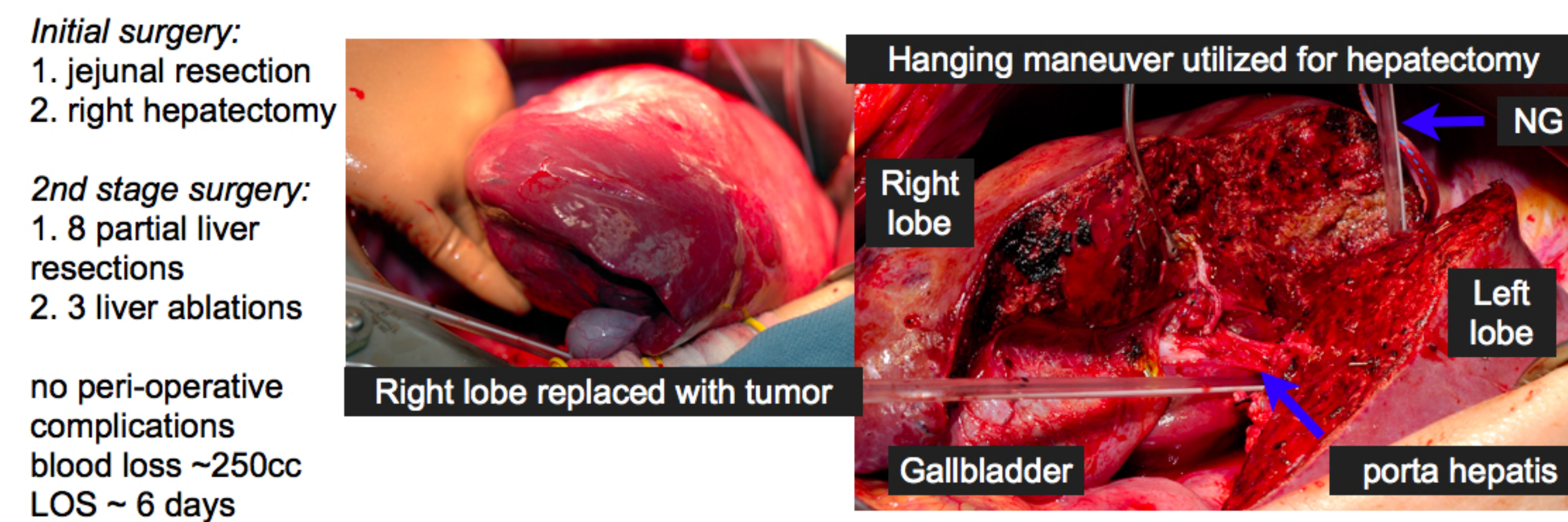
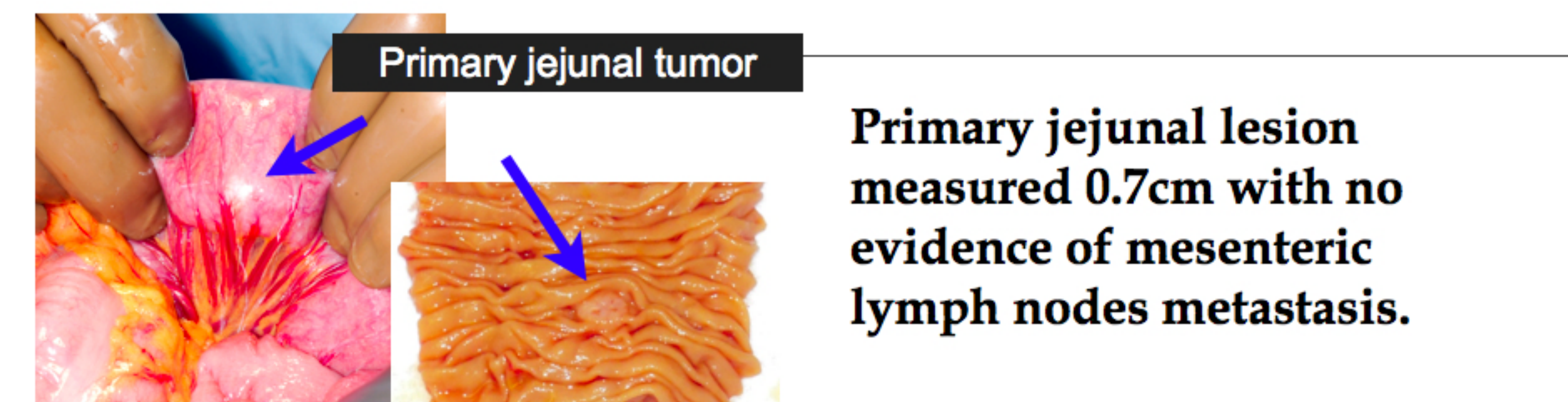
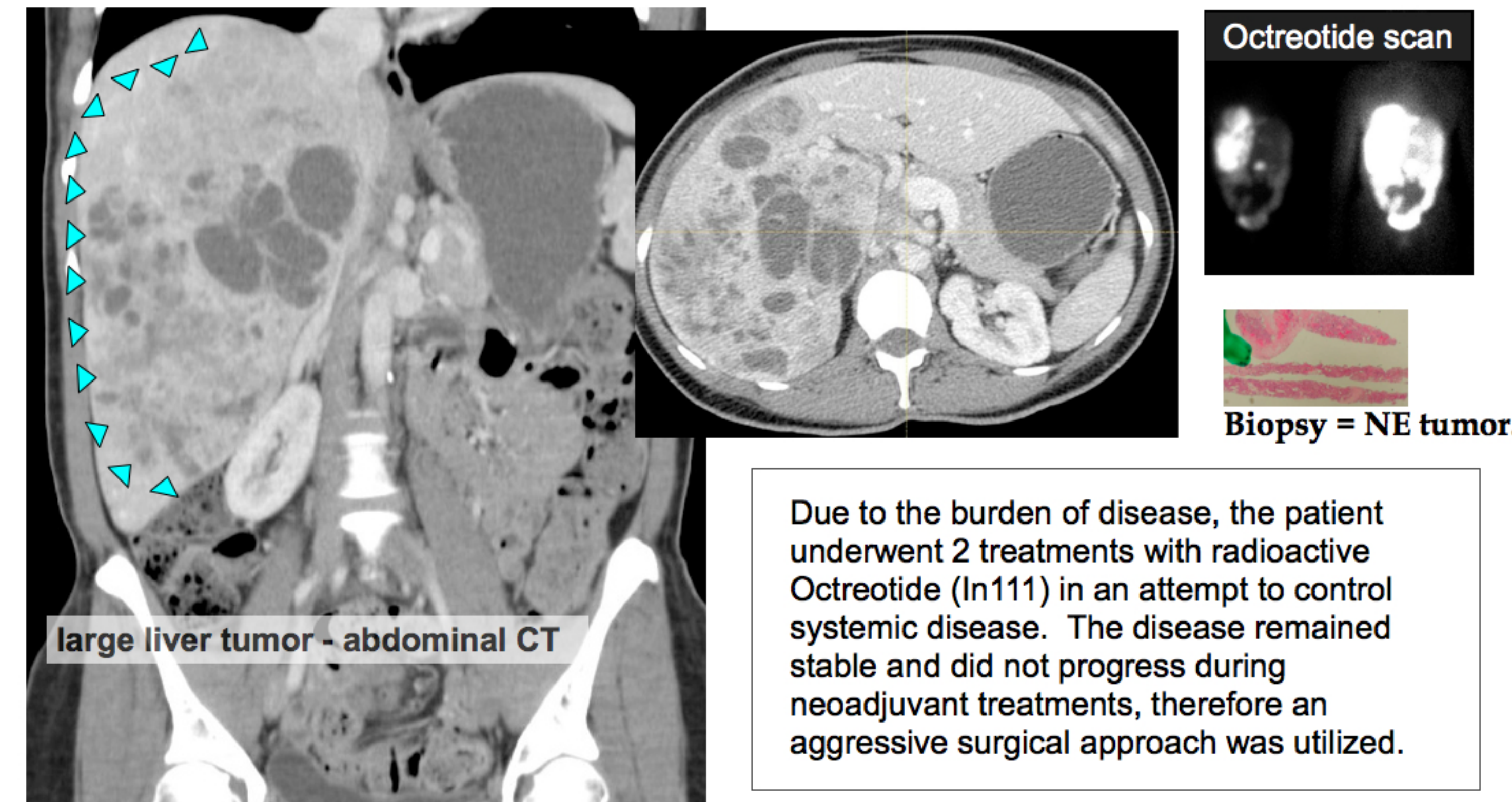
We present 2 cases - a pancreas head islet cell tumor and a jejunal primary with metastatic liver disease - to illustrate the multi-disciplinary approach.

Algorithms



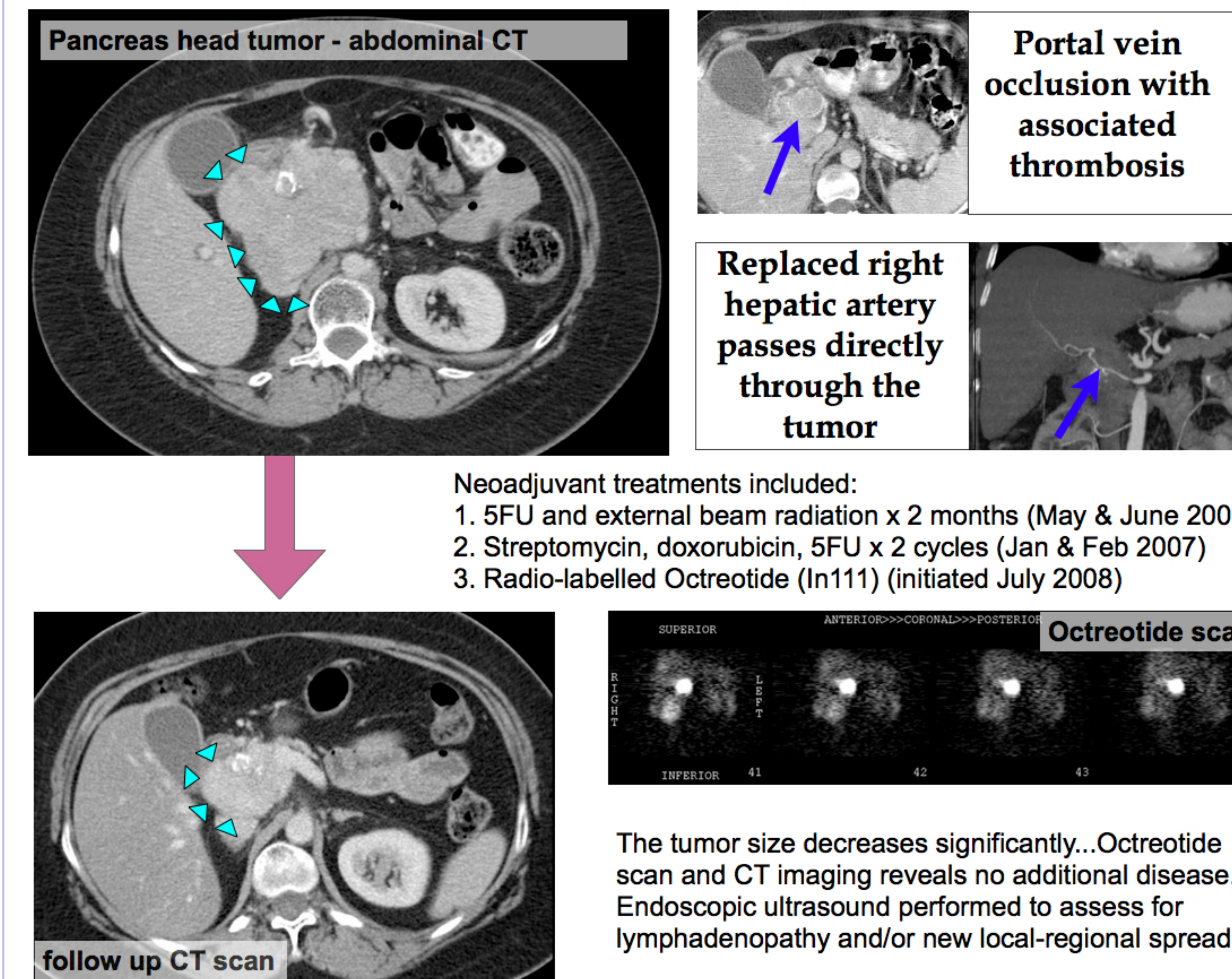
1st Patient.

41 year old female presents with new acute onset abdominal pain - abdominal imaging reveals a large tumor occupying the right lobe of the liver, with additional lesions in the left lobe.

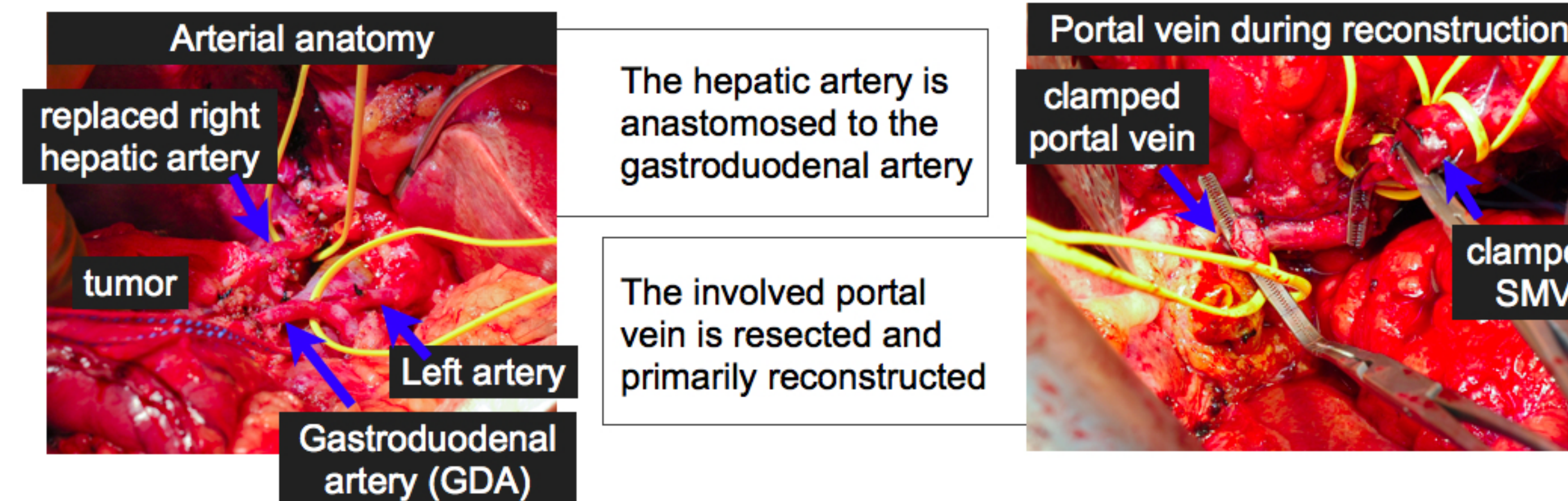


2nd Patient.

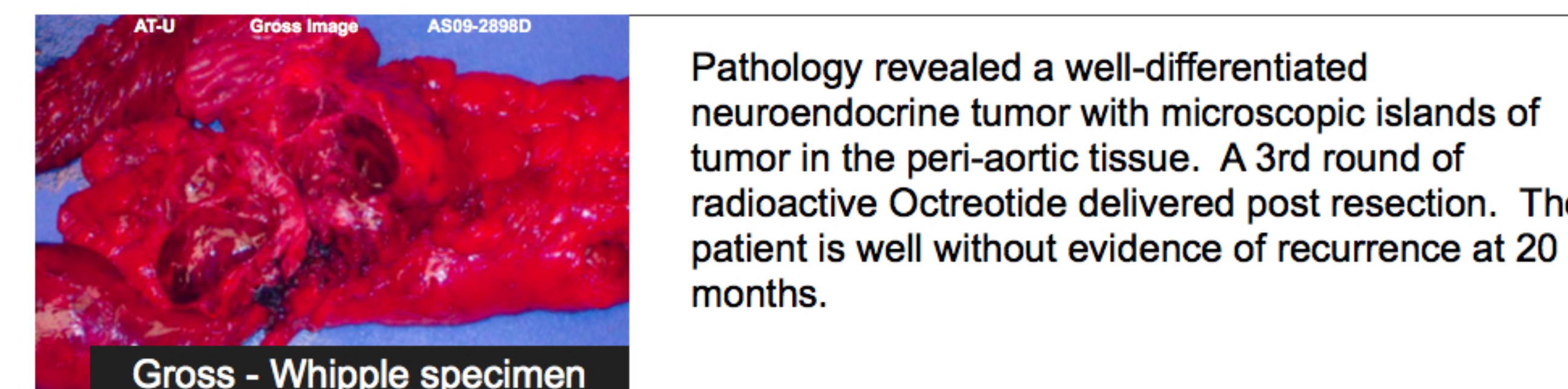
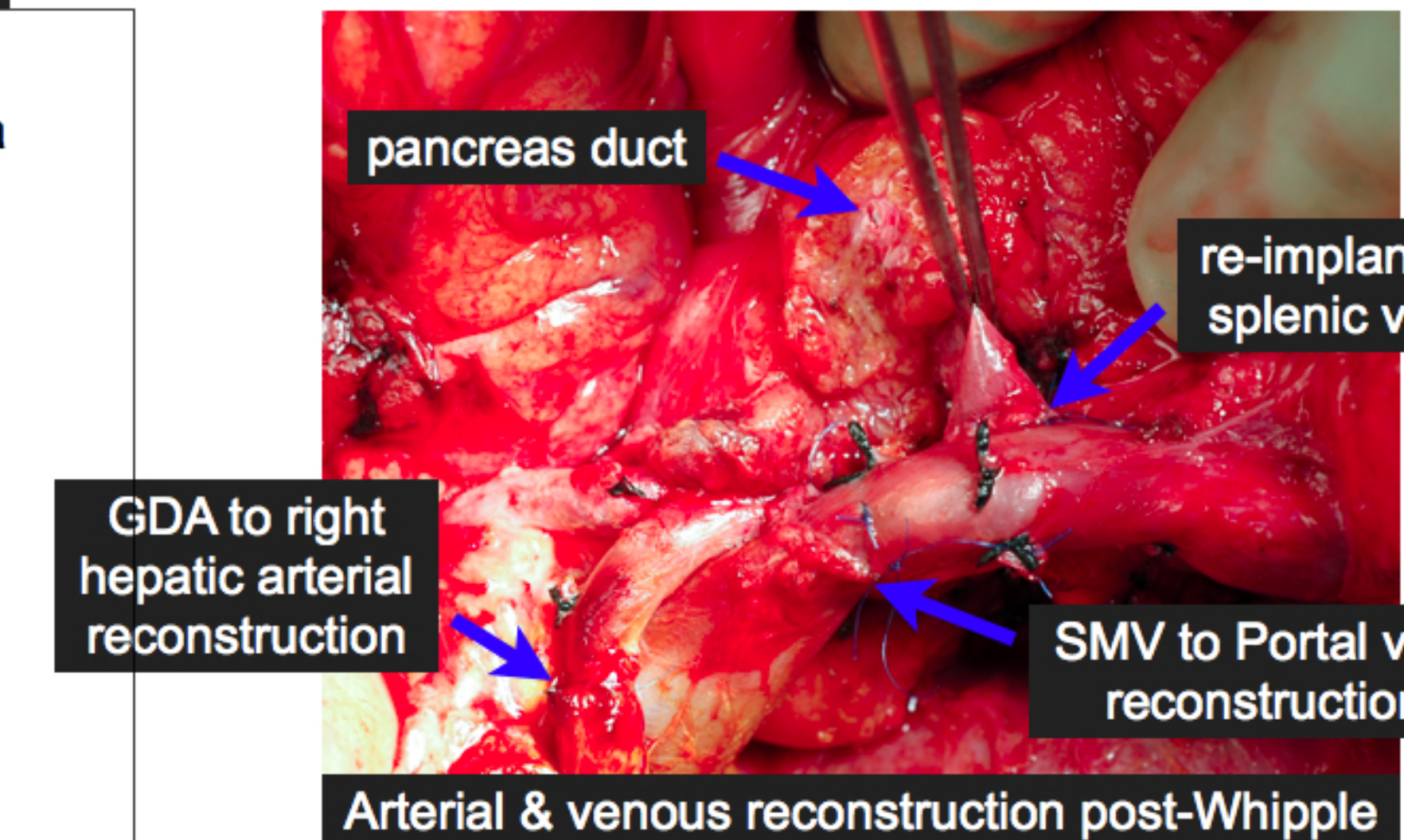
53 year old female presents with jaundice, workup reveals a 13cm pancreatic head mass. The tumor is considered borderline resectable due to the size and location of the tumor.



Surgery with portal vein and hepatic artery reconstruction is planned



The tumor is resected with a pancreaticoduodenectomy requiring a portal vein and hepatic arterial resection and reconstruction. There were no peri-operative complications; blood loss ~ 400cc; operative time ~ 636 mins.; and length of stay was 9 days with an ICU time.



Surgical Results

| | Patient 1* | Patient 2 |
|------------------------------|-------------------------------------|--|
| Procedure performed | Right hepatectomy | Whipple +vascular reconstruction |
| Length of stay | 6 days | 9 days |
| Blood loss | 250ml | 400ml |
| Operative time | 310 mins | 636 mins |
| peri-operative complications | none | none |
| Post-surgical follow up | 14 months | 20 months |
| Disease | stable | no radiographic evidence |
| Concerns | large burden of disease & poor diff | persistent low level elevation in Chromogranin |

*results from major right hepatectomy - second stage surgery had similar results

Conclusions

A multi-disciplinary approach is essential for patients with neuroendocrine cancer

An aggressive multi-disciplinary approach to neuroendocrine cancer may provide a survival benefit

An aggressive combined (surgical resection, chemotherapeutic, & radiation oncology) approach to pancreas and liver neuroendocrine cancer can be performed safely and with minimal complications

Comments?

Do you agree with the treatment approach?



The 1st patient and her family

If you have questions, comments or advice regarding the current or future treatment options please text message me at 952-334-6905 or email me at mackenzie.shawn@gmail.com