

Hospital São Francisco Xavier – Centro Hospitalar Lisboa Ocidental
Lisbon, Portugal

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Neuroendocrine tumor – the change of the tumor

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- ◉ 73 year-old woman, ECOG=1, body weight=55Kg
- ◉ **Personal History:** arterial hypertension, ex-smoker

September/2014

- Partial bowel obstruction
- weight loss of 5 kg
- without anorexia or carcinoid syndrome


▪ Colonoscopy:

- Transverse colon: sessile polyp with 3 mm → Histology: Tubular microadenoma with low grade dysplasia.
- Cecum: neoformation with 5 mm → Histology: Adenocarcinoma G2, invading submucosa

▪ TAP-CT + MRI: 2 hepatic nodules in right lobe with 3 and 2 cm in segment VI and V

Neuroendocrine tumor – the change of the tumor

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A large purple arrow pointing to the right, representing a timeline. A white box with a purple border is positioned on the arrow, containing the date "October/2014".


October/2014

Right hemicolectomy + right adnexectomy + hepatic segmentectomy V + metastasectomy of VI and VIII segments

- Histology:
 - Neuroendocrine tumor of ileocecal valve, invading subserosa, 0/23 lymph nodes
 - Chromogranin A and synaptophysin positive
 - G2 - Ki-67 15%, 10 mitosis/10 HPF
 - Right ovarian and liver (segments V, VI, VII) infiltration
 - pT3N0M1 R0 – stage IV - WHO classification 2

Neuroendocrine tumor – the change of the tumor

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A large, light purple arrow pointing to the right, representing a timeline. It has a white rectangular box at its tail containing the date 'November/2014'. Below the arrow, there is another white rectangular box containing the text 'MRI: two new hepatic lesions with 9 and 10 mm in segment II'.


November/2014

MRI: two new hepatic lesions with 9 and 10 mm in segment II

- Proposed:
 - Hepato-bilio-pancreatic MDT of the Curry Cabral Hospital (HCC), in Lisbon, for evaluating the possibility of loco-regional therapy

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January/2015

Hepatic metastasectomy
Excised 8 lesions (0,8-1,5 cm) in segment II and 2 diaphragmatic implants.

- Histology:
 - Hepatic and diaphragmatic infiltration due to neuroendocrine tumor G2
 - Ki-67 10%, 13 mitosis/10 HPF

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A horizontal timeline represented by a large purple arrow pointing to the right. A small box labeled 'April/2015' is positioned on the arrow.

April/2015


DOTA-NOC-PET

Bilobar hepatic lesions with hyperexpression of somatostatin receptors. No evidence of extrahepatic secondary disease with increased expression of receptors for somatostatin.

- Chromogranin A 4,9 mg/dL
- **Radiofrequency ablation**

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July/2015

TAP-CT: New hepatic lesions – disease progression

- Started octreotid 20mg intramuscular injection, monthly

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September/2015

TAP-CT: Hepatic disease progression

- Chromogranin A 9,6 mg/dL
- Maintain somatostatin analogs
 - dose increase: octreotid 30 mg

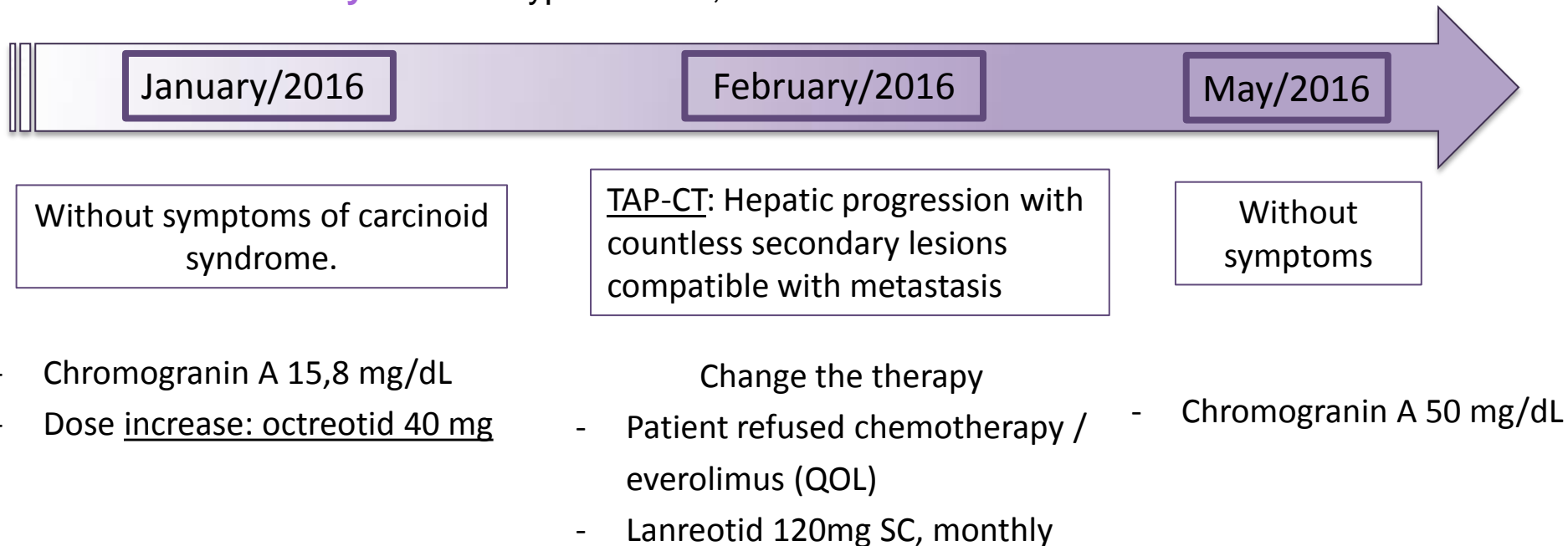
November/2015

Without symptoms of carcinoid syndrome

- Chromogranin A 13,5 mg/dL
- Maintain octreotid 30mg

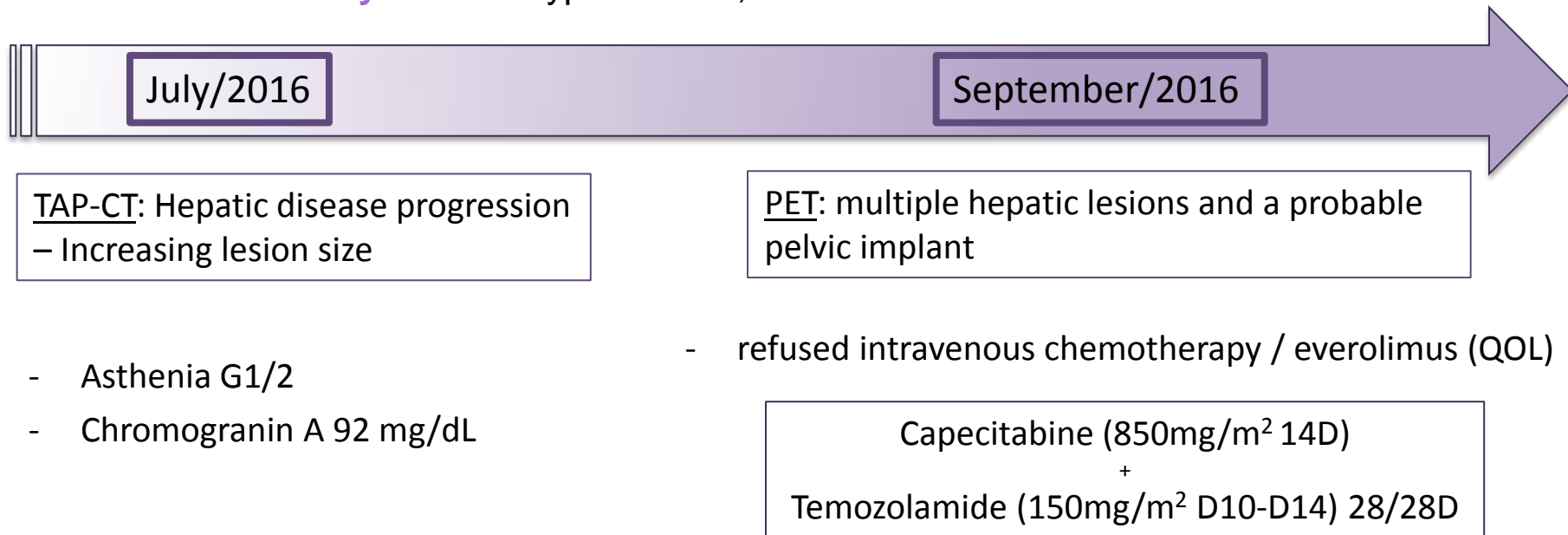
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4 cycles of capecitabine + temozolamide

- Chromogranin A 175 mg/dL
- Toxicity:
 - asthenia G2
 - hand-foot-syndrome G3
- Change to everolimus 10mg/day

Without symptoms

- Everolimus 10mg/day
- Toxicity:
 - Thrombocytopenia
- Awaiting imaging evaluation

Neuroendocrine tumor – the change of the tumor

Discussion

- ◉ The treatment of neuroendocrine tumor is a challenge.
- ◉ Patients tend to present after a long history of vague nonspecific symptoms with disseminated metastasis.
- ◉ The liver is the predominant site of metastatic disease in gastrointestinal neuroendocrine tumors. Surgery is often advocated in patients with limited liver metastasis.

Neuroendocrine tumor – the change of the tumor

Discussion

- ◉ In this case:
 - Re-biopsy liver metastasis to re-assess the proliferative activity?
 - How to treat patients with Ki-67 10-15%? With somatostatin analogs? (Promid/Clarinet trial Ki-67 <10%)
- ◉ If the disease continues to progress what to do?
 - Keep chemotherapy and switch line?
 - Peptide receptor-targeted radiotherapy (Yttrium-90 and Lutetium-177) - in metastatic carcinoid tumors refractory to octreotid was associated with improvement in symptoms and radiographic regression
- ◉ The patient must be respected
 - despite the therapeutic indications and guidelines, we must adjust the therapy according to his will

