RECTAL CANCER
CLINICAL CASE PRESENTATION

Francesco Sclafani
Medical Oncologist, Clinical Research Fellow
The Royal Marsden NHS Foundation Trust, London, UK
Disclosure

I have nothing to declare
History and presentation

- **Social history**
  59 years, male, self-employed company director
  Non smoker, drinking ~20 units of alcohol per week

- **Past/family medical history**
  Laparoscopic cholecystectomy
  No family history of cancer

- **Clinical presentation**
  4-month history of change in bowel habit and intermittent rectal bleeding
  ECOG PS 0

ECOG, Eastern Cooperative Oncology Group; PS, performance status
Initial assessment

- **Digital rectal examination**
  No palpable mass

- **Colonoscopy**
  Circumferential, non-obstructing, rectal mass between 11 and 15 cm

- **Histology**
  Moderately differentiated invasive adenocarcinoma, MMR proficient

- **Bloods**
  Haematology/biochemistry within normal ranges, CEA 11 µg/L

CEA, carcinoembryonic antigen; MMR, mismatch repair
Q1: Which staging investigations would you request?

1. Chest X-ray and CT abdomen-pelvis
2. CT thorax-abdomen and EUS
3. CT thorax-abdomen and MRI pelvis
4. Chest X-ray, liver US, and MRI pelvis
5. CT thorax-abdomen-pelvis and PET scan

CT, computed tomography; EUS, endoscopic ultrasound; MRI, magnetic resonance imaging; PET, positron electron tomography; US, ultrasound
Staging investigations

- MRI pelvis
  - Tumour of the upper rectum (11-16 cm from the a.v.)
  - 13 mm extramural spread
  - 4 heterogeneous/irregular border lymph nodes
  - EMVI positive (left middle rectal vein)
  - No MRF involvement

Stage: cT3N2Mx

- CT thorax-abdomen
  No evidence of distant metastases (M0)

a.v., anal verge; CT, computed tomography; cTNM, clinical tumour, node, metastasis; EMVI, extramural venous invasion; MRF, mesorectal fascia; MRI, magnetic resonance imaging;
Q2: What treatment would you recommend?

1. Surgery
2. Neoadjuvant short-course RT
3. Neoadjuvant long-course CRT with capecitabine
4. Neoadjuvant long-course CRT with capecitabine and oxaliplatin
5. Neoadjuvant long-course CRT and systemic chemotherapy (either before or after CRT)
6. Neoadjuvant systemic chemotherapy (i.e., FOLFOX or CAPOX)

CAPOX, capecitabine/oxaliplatin; CRT, chemoradiotherapy; FOLFOX, folinic acid/5-fluorouracil/oxaliplatin; RT, radiotherapy
Treatment

- **Long-course chemo-radiotherapy**
  45 Gy in 25 fractions + 9 Gy boost in 5 fractions
  Concurrent capecitabine (825 mg/m² twice daily continuously)

- **Toxicity**
  - Grade 1 diarrhoea
  - Grade 1 lethargy
Q3: How many weeks after completion of CRT would you recommend assessing response to treatment?

1. 2 - 3
2. 6 - 8
3. 10 - 12
4. 14 - 16
5. > 16
Response assessment

MRI pelvis was repeated 6 weeks after completion of CRT

Baseline MRI

Post-CRT MRI

CRT, chemoradiotherapy; EMVI, extramural venous invasion; MRI, magnetic resonance imaging
Response assessment

MRI pelvis was repeated 6 weeks after completion of CRT
- 10 mm extramural spread
- Mixed signal/irregular border lymph nodes (smaller than previously)
- Persistent venous invasion (fibrotic regression of the more extensive venous infiltration)
- ymrTRG4 (predominant tumour signal, < 25% fibrosis)
- No MRF involvement

Stage: ymrT3cN1Mx

CRT, chemoradiotherapy; MRF, mesorectal fascia; MRI, magnetic resonance imaging; TNM, tumour, node, metastasis; TRG, tumour regression grade
Q4: Which surgical approach would you recommend?

1. Local excision
2. Low anterior resection according to the TME principles
3. Abdominoperineal resection
4. Watch & wait approach and salvage surgery if tumour persistence/progression
5. Other
Surgery & pathology

- **Low anterior resection according to the TME principles**
  - Performed 8 weeks after completion of CRT
  - No post-operative complications

- **Histology**
  - Resection in the mesorectal plane
  - Scanty residual moderately differentiated adenocarcinoma (Dworak TRG 3)
  - ypT3N0 (0/45 lymph nodes)
  - No lymphatic or venous invasion

TME, total mesorectal excision TRG, tumour regression grade
Q5: What treatment would you recommend next?

1. 4 months of adjuvant 5-FU/FA or capecitabine

2. 3 months of adjuvant capecitabine and oxaliplatin (i.e., CAPOX)

3. 4 to 6 months of adjuvant 5-FU and oxaliplatin (i.e., FOLFOX)

4. Observation

5. Other

5-FU, 5-fluorouracil; CAPOX, capecitabine/oxaliplatin; FA, folinic acid; FOLFOX, folinic acid/5-fluorouracil/oxaliplatin; RT, radiotherapy
Adjuvant chemotherapy

- 4 months (i.e., 6 cycles) of adjuvant chemotherapy with single agent capecitabine
  
  Toxicity
  - Grade 1 fatigue
  - Grade 1 hand & foot syndrome

- Follow-up
  No evidence of recurrent disease 18 months after surgery
THANKS