Pathology of Treated GI Neoplasia

Pathology section seminar
Liverpool DDF meeting

Tuesday 19th June 2012 at 14:00-15:15
Venue: Hall 11c in the ACC

Presenters:
Phillip Kaye, Adrian Bateman,
Shaun Walsh, Norman Carr, Judy Wyatt
Treated Barrett’s

Philip Kaye
NUH
55 year old man on long standing Barrett’s surveillance
62 year old man – EMR for HGD
50 year old man - nodule post RFA for LGD
p53
History

• 56 year old man
• Refractory dysphagia following treatment for upper GI malignancy
• Gastrectomy performed
• Sections are from stomach wall
Mucosal aspect
Serosal aspect
Muscularis propria
GIST treated with TKIs 
Three cases 
Dr Shaun Walsh 
Ninewells Hospital 
Dundee
Case 1

• Male patient, age 43 yrs.
• Dx with gastric GIST 1 year ago
• KIT positive on biopsy.
• Tyrosine kinase therapy for 10 months to ‘shrink tumour’ and avoid total gastrectomy
• Tumour decreased very little in size but limited gastrectomy achieved
• Any evidence of response and can you do mutation analysis now please?
Resected tumour after TKI
Resected tumour after TKI
Case 2

- Female age 49yrs.
- Dx. with small bowel GIST 1 yr. ago
- R0 resection. Tumour focally KIT positive.
- Tx. with Tyrosine Kinase inhibitor for one yr.
- Now has recurrence
- Can you do mutation analysis please?
Resected tumour after TKI
Resected tumour after TKI
Case 3

- Female age 62 yrs.
- Large Gastric GIST. Liver metastases.
- KIT, DOG-1 positive core biopsy.
- Treated with TKI’s 6 months, no response
- New peritoneal metastases sampled
- Any evidence of response?
Primary tumour untreated
New peritoneal metastasis
Pathology of treated colorectal carcinoma

Norman Carr
Chemoradiation effects

- Fibrosis
- Necrosis
- Acellular mucin
- Calcification
A multi-centre pathologist survey on pathological processing and regression grading of colorectal cancer resection specimens treated by neoadjuvant chemoradiation

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Abstract To ascertain the approach and degree of consensus of pathologists in the handling and regression grading of colorectal cancer resection specimens treated with neoadjuvant chemoradiation, a ten-part questionnaire was circulated to 18 gastrointestinal pathologists in eight countries. The questions were specific and addressed pertinent issues related to colorectal cancer with neoadjuvant chemoradiation. There is a lack of consensus on how to handle the specimen, number of sections taken, correlation with pre- and post-operative radiological imaging, and especially, regression grading schema employed. Consensus in the form of guidelines is required so that the pathological assessment
Modified RCRG grading system (Bateman AC et al)

1. Malignant epithelium <5%
2. Malignant epithelium 5 to 50%
3. Malignant epithelium >50%
RCPath guidelines – staging

• “For tumour staging following neoadjuvant therapy, only the presence of tumour cells in the surgical specimen is taken to determine the stage. Fibrosis, haemorrhage, necrosis, inflammation and acellular mucus are ignored. Cases with complete regression are therefore recorded as … ypT0”
References

• Bateman AC et al. Rectal cancer staging post neoadjuvant therapy – how should the changes be assessed? Histopathology 2009; 54:713-21


Pathology of treated liver tumours

Judy Wyatt
Mrs KM 28F

Presented with bulky liver metastases, CK20+ve subsequently sigmoid primary identified.

Treated with FOLFOXIRI – irinotecan, oxaliplatin, 5FU very good response.

Right trisectionectomy and segment 2&3 metastasectomies performed at same time as anterior resection of rectum  ypT3, ypN1, ypV1, ypR0, TRG2

Liver: Right trisectionectomy, segments 4-8, 1,170kg,
7 tumours 5-70mm.
Left metastasectomies x2, 1.2g and 2.1g,
2 tumours, 7mm and 10mm lesions
Mr PE, 27M

- August 2008: inoperable carcinoma of upper rectum with bulky bilateral liver metastases.


- March 2009: Candidate for SIRT treatment with aim of surgery if further response.

- June 2009: SIRT
- July 2009: nausea, vomiting, ascites, 3 weeks after treatment. Deteriorated and died 3 weeks later.

- Consent autopsy: