Testis Cancer

- The Tornado Tumour
- The Hurricane Cancer
- Now The Curable Cancer
Epidemiology

1-2% of male cancers. 7 cases per 100,000
175 new cases in Ireland
5 year survival now 95%

- why bother?
Epidemiology

- Young men 15 – 40 commonest solid cancer
- Potentially lethal every case
Aetiology/Risk Factors

- Undescended testis  Risk x 5  ↓ by orchidopexy
- Family history
- Past history cancer testis/CIS
- Infertility
Pathology

Germ cell testis cancer
- Seminoma 52%
- Non Seminoma 48%

Non germ cell testis cancer Rare
Clinical Presentation

- Young man with testis ‘lump’
  discomfort/trauma

- Metastatic disease 10% presentation

Be aware young men + young doctors
Tests

- Scrotal ultrasound
- Serum tumour markers (STM)
  - AFP α fetoprotein 50 – 80% NS
  - p HCG tumour choriogonadotropin 20 – 60% NS
  - LDH Lactate dehydrogenase 20 – 60% NS

Biopsy - No
Radical Orchidectomy

- Groin incision
- "Radical" removal and without contamination
- Testis sparing surgery – bilateral cancer/
  solitary testis
Clinical Staging

CT scan

Stage 1  Testis only
Stage 1s Serum markers remain ↑

Stage 11 Retroperitoneal abdominal node +
A, B, C - size/bulk

Stage 111 Retroperitoneal nodal RPN +
Visceral metastatic lungs

Risk stratification within groups
Management Sequence

Clinical Diagnosis → ultrasound + markers
→ orchidectomy → CT scan → pathology + repeat markers
→ further management/sperm banking
Prognosis in general

Seminoma
- 85% stage 1
- risk of occult mets low
- very sensitive to radiation/chemotherapy
  The “good guy”

Non Seminoma
- Only 33% Stage 1
- risk of occult mets in Stage 1 25%
- “curable” but may need multinodal Rx
Seminoma Stage 1

Historical – Orchidectomy + adjuvent Abdom Radiotherapy

Modern
- Orchidectomy + radiotherapy reduced template
- Orchidectomy + carboplatin x 2
- Orchidectomy + surveillance
Management Metastatic Seminoma

- Platinum based chemotherapy (BEP)
- RPLND rare
Management of Non Seminoma Germ Cell Testis Ca

Controversy ← Tradition

USA – Urological surgery – abdominal clearance

UK – Radiotherapy
Clinical Stage 1 NSGC – “Conservative” UK Approach

- Surveillance

28% relapse rate, but mortality rate only 1%
advantages avoids RPLND 70% + patients

disadvantages

- Compliance
- Psychological
- Cost
- High risk relapse
- Over treatment with chemo of false negative stage 11
Stage 11 NSGC – ‘UK Approach’

Induction chemotherapy [BEP] 100%

↓

PPLND clearance of residual masses 80%

Advantages
  * 20% no RPLND
  * Facilities/expertise

Disadvantage
  * overtreatment of cases without mets
Stage 1 & 11 Surgical Management – USA Approach

Primary RPLND

- accurate staging
- therapeutic
- ease of follow-up and treatment

Disadvantages

- RPLND (-) ive 70% of cases clinical stage 1
- risks of RPLND
USA Surgical Approach

V’s

Medical Approach UK

- Similar cure rates 95 – 100%
- Morbidity cost etc.
# Advanced Metastatic Disease (NSGC)

<table>
<thead>
<tr>
<th>Risk</th>
<th>Disease Volume</th>
<th>Lungs Only</th>
<th>Marker Blood Tests</th>
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<tbody>
<tr>
<td>Good risk</td>
<td></td>
<td>lungs only</td>
<td>marker blood tests</td>
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<tr>
<td>Intermediate</td>
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- **BEP Chemotherapy x 4**
  - Complete remission: 20-60%
  - Partial remission: 40-70%
  - Advancing disease: 5-15%
Post chemo residual mass
Post Chemotherapy RPLND

- Clearance of abdominal residual masses
  
  Pathology prognostic  
  40% Necrosis  
  45% Teratoma  
  15% Cancer

Therapeutic Surgery

Follow-up
Testis Cancer in Ireland – Where are we?

Survival ↑ 95% “no problems”

Role for the public
- Public knowledge/delay in presentation/outcomes

Role for medical profession/management
- Multidisciplinary management
- Informed choice of treatment options
- Reduction in morbidity of treatments
- Specialist centre