



Renal tumours in the IVC :

Hard learned lessons over 15 years

Tim O'Brien Guys & St Thomas' Hospitals, London





What I wish I'd known in 1999

Tim O'Brien Guys & St Thomas' Hospitals, London



What I wish I'd known in 1999...



Kit

Technique

Results

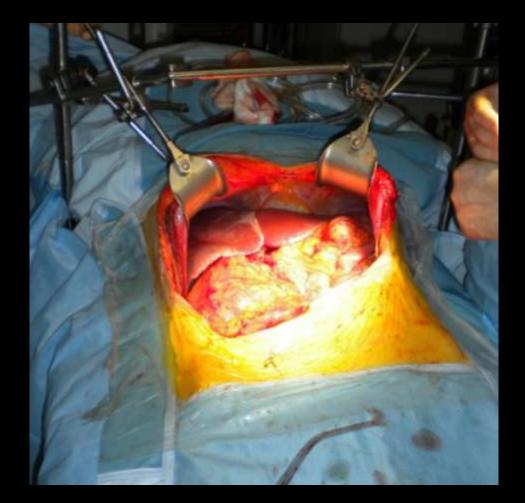
Disappointments

UK

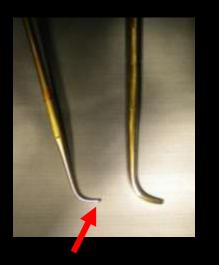


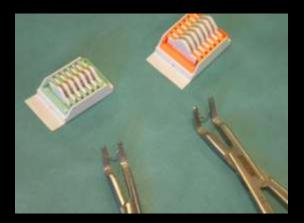
The Thompson retractor...





Equipment (2)



























Part Provide Statistics Provide Statistics



































Technique – incisions





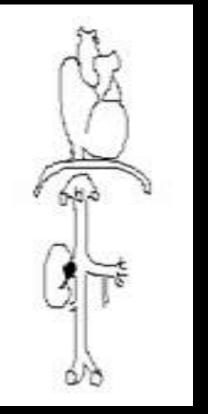
Mercedes Benz

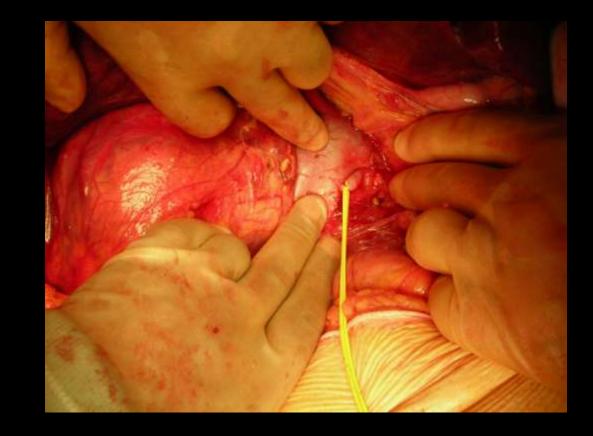




For right sided tumours now almost routine...



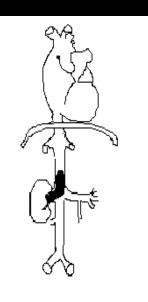




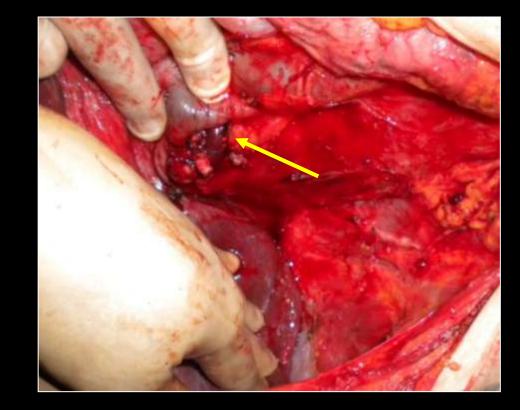


Cardiac venous return through the L1 lumbar









Difficult dissections (1) -

'Tumour thrombus' & Vascular thrombus

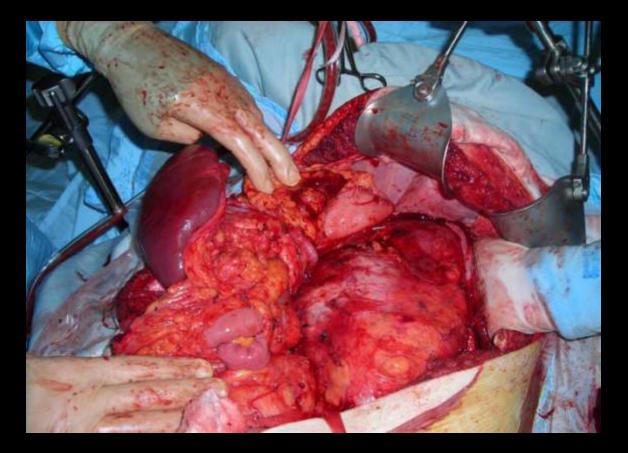








the vascular surgery may be the easy bit





Predicting the difficulty of surgery (3) - dissectabilty











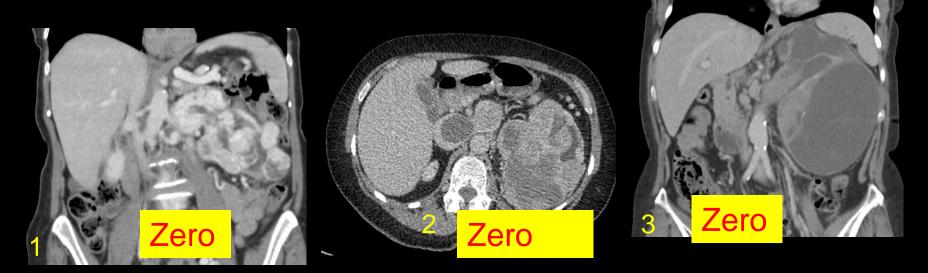


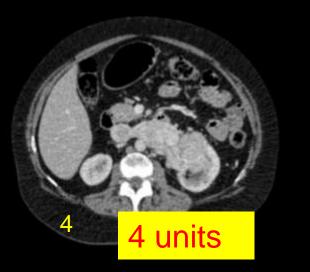


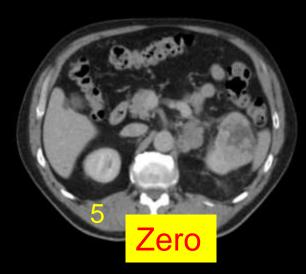


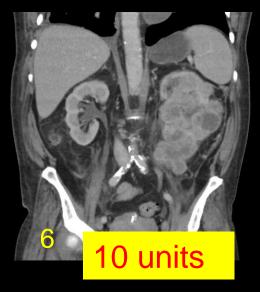
Predicting the difficulty of surgery (3) - intraoperative transfusion













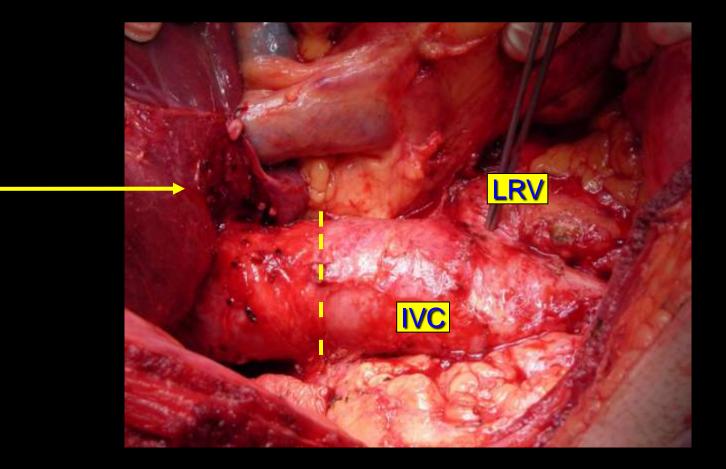


Technique - Level 2 & 3 thrombus

- Imaging upto date ?
- How high does the thrombus extend ?
- Is the thrombus 'friable' or 'solid' ?
- Could the tumour thrombus infiltrate the wall of the IVC ?
- Is a caval graft required ?

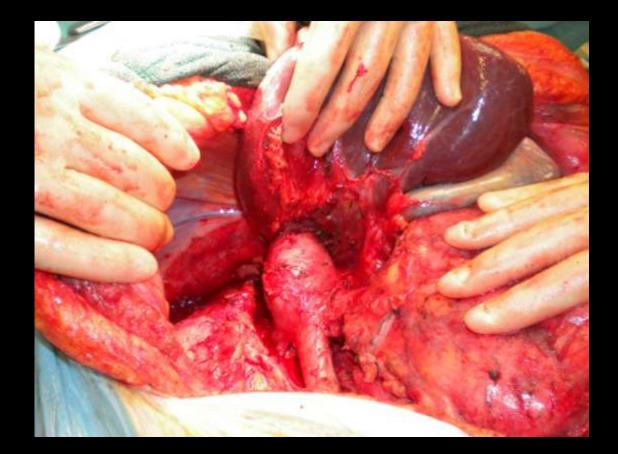
Technique – the liver surgery

Mobilising the caudate lobe



Technique – the liver surgery

Mobilizing the whole right lobe of the liver





Transforming right adrenal surgery...







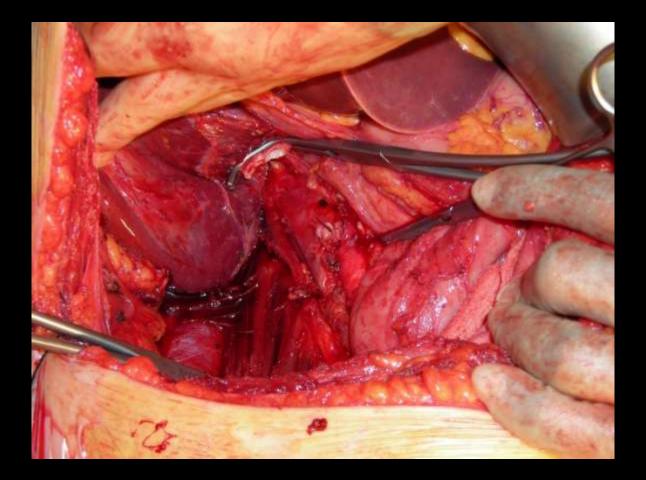
Technique - Lying free or adherent to the wall ?

Is the IVC expanded ?

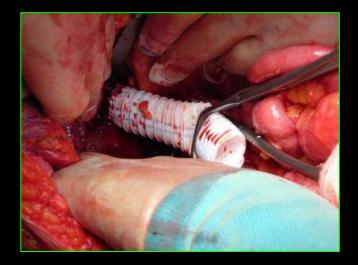


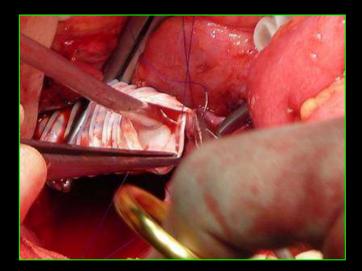


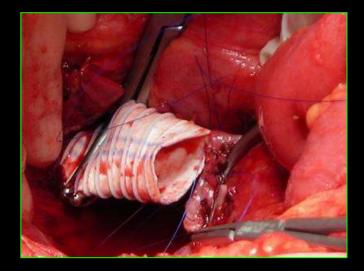
Adherent thrombus excised en-bloc with IVC

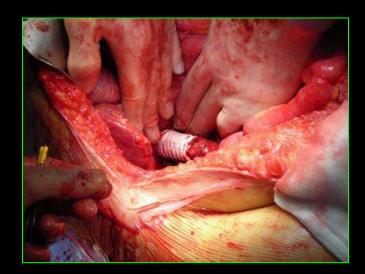


18mm ringed goretex secured with 4/0 prolene

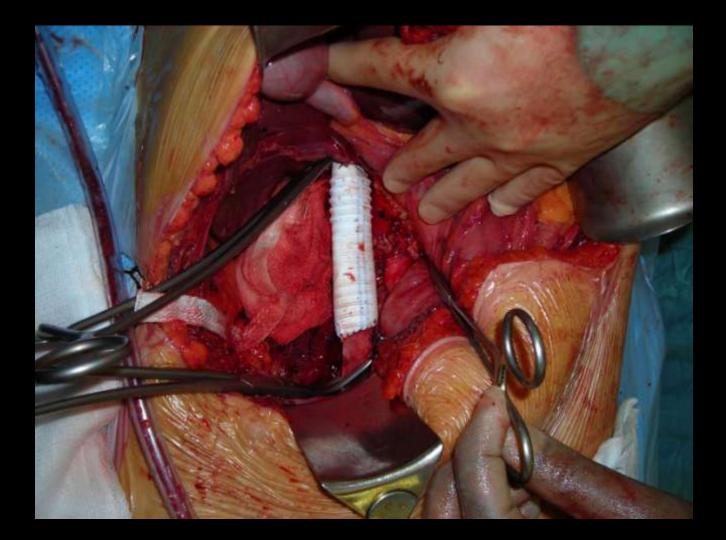








IVC replacement



The composition of the tumour "thrombus"





The composition of the tumour "thrombus"





Median survival 55/12

Median survival 8/12

Bertini Eur Urol 2011 (n= 174 cases)



IVC Replacement / grafting 2001-2014 (n=15)



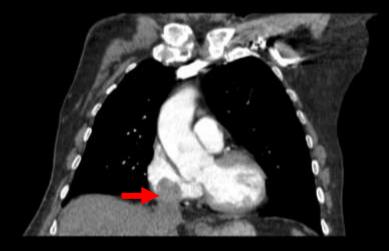
- 14 replaced / 1 patched
- Median age 51
- Op time 270 minutes (175-540)
- Blood loss 1200 ml (400-5000)
- Veno-veno bypass = 3 patients
- Post op stay 11 days (7-29)
- One in-hospital death
- One reoperation for adhesions

- Level 3 n=3
- Level 2 n=7
- Direct extension n=3

~38% free of recurrence

Renal tumours into the heart



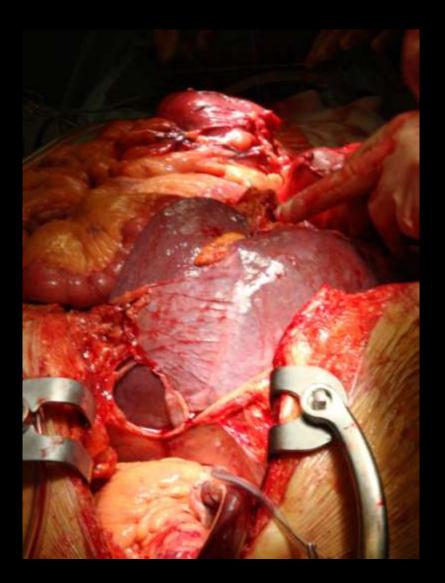




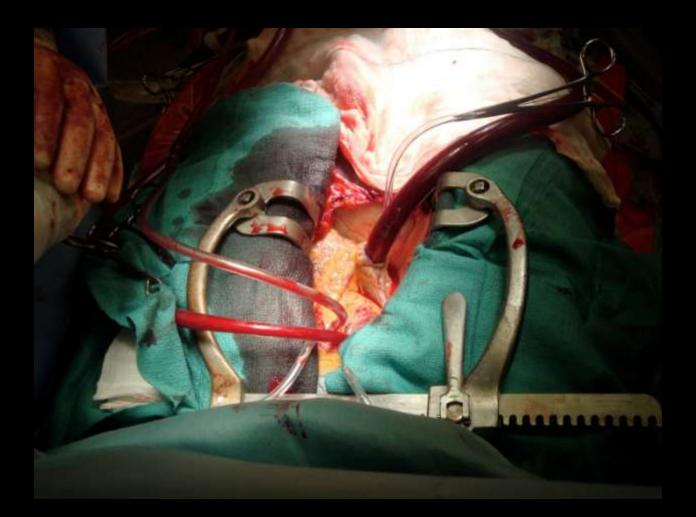


Median sternotomy





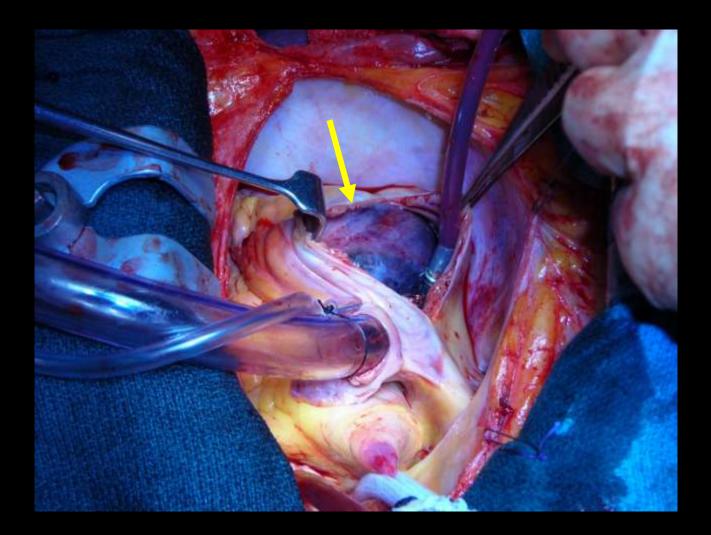
Cardiopulmonary Bypass and cooling to 20°C before arrest ~ 30 minutes of arrest time





Inside the right atrium...







If all goes well.....









Renal tumours in the heart

Decisions Decisions Decisions

1. Is it safe ?

2. Is it helpful ?



Intra- cardiac tumours – is it safe ?



Overall mortality 3/32 (9%)

Pre-op INR ~2: 3/5 died

All 3 who died were aged >70 years

No-one with INR~2 aged >70yrs survived (3/3)

No deaths in patients with normal INR (0/27)



Intra- cardiac tumours – is it safe ? (n=32)



We <u>confidently</u> offer surgery to those with a normal INR

We avoid surgery in patients with a raised INR who are old



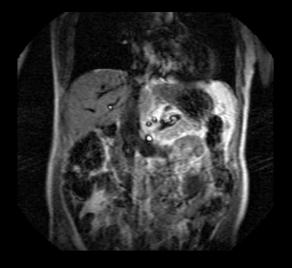


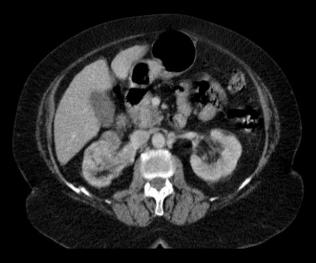






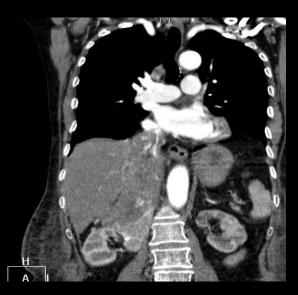


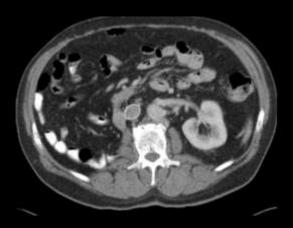




The ones who didn't make it....







BJUI 2003

Identifying under-performing surgeons

R. SINGH, N. SMEETON* and T.S. O'BRIEN Departments of Urology, and "Public Health Sciences, Guy's Hospital, London, UK Accepted for publication 11 February 2003

1045-1145

Wednesday 28 June 2006 am

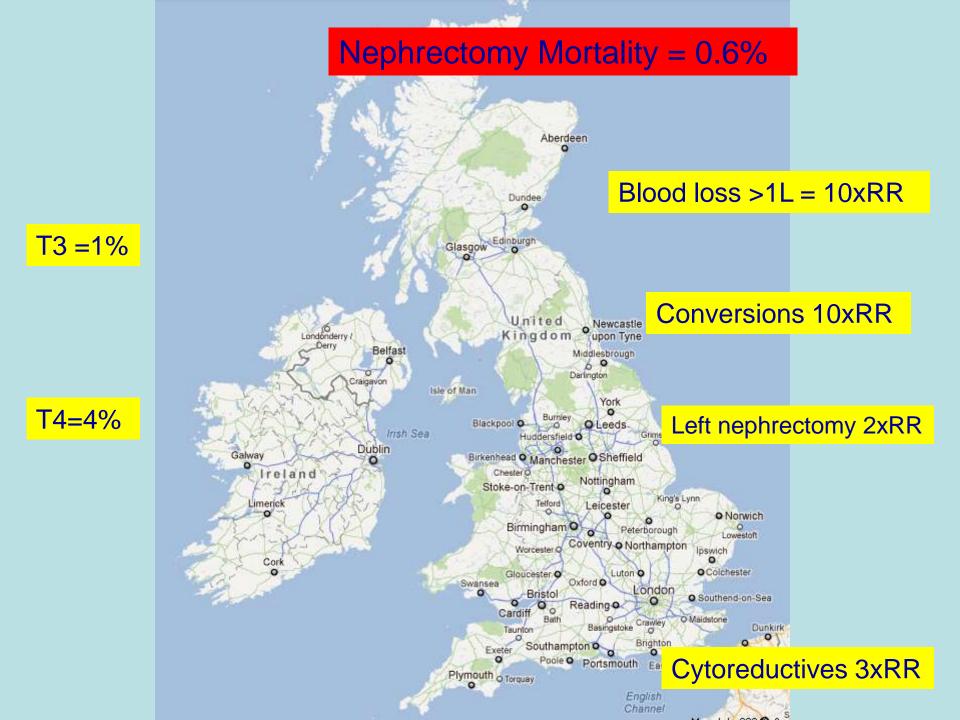
Theatre 1

PLENARY SESSION 5

HOW TO CHOOSE A COMPETENT SURGEON AND A SAFE HOSPITAL

A session exploring the arguments for the publication of data on urological surgical outcomes in the Press

Chairman: Mr Tim O'Brien, Consultant Urologist, Guy's Hospital, London



At presentation

6 months later...





