

Recipient assessment

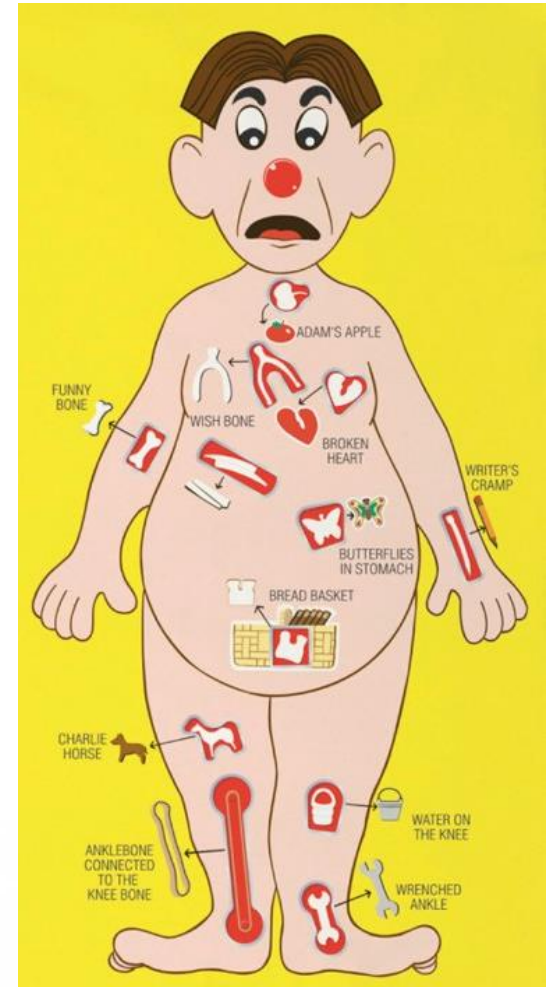
Guiding principles for assessment:

1. Transplantation is not contraindicated for the patient
2. The patient will receive a suitably matched organ
3. The patient will have a good chance of surviving the transplant operation
4. The patient has room to put the new organ(s) in
5. The new organ(s) will receive an adequate blood supply
6. The patient will be able to look after their new organ(s)

Kidney assessment:

Stanley...

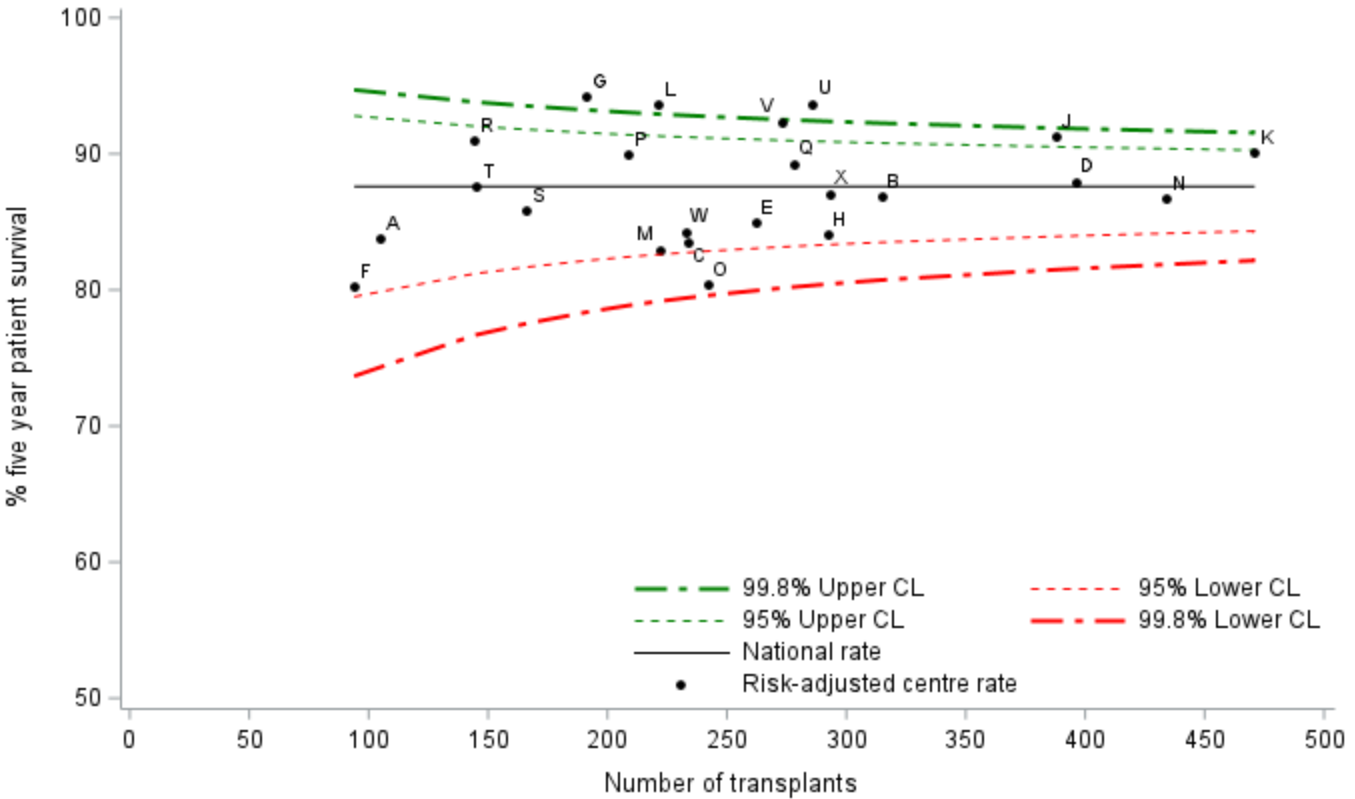
- 28 year old man
- ESRF unknown cause- On PD for 5 years
- BMI 37
- Drinker and recreational drug use
- Not currently working
- No live donors
- Didn't want transplant as a mate told him it was bad and happy with PD- multiple peritonitic infections
- No blood transfusions and no pregnancies
- Preserved urine output



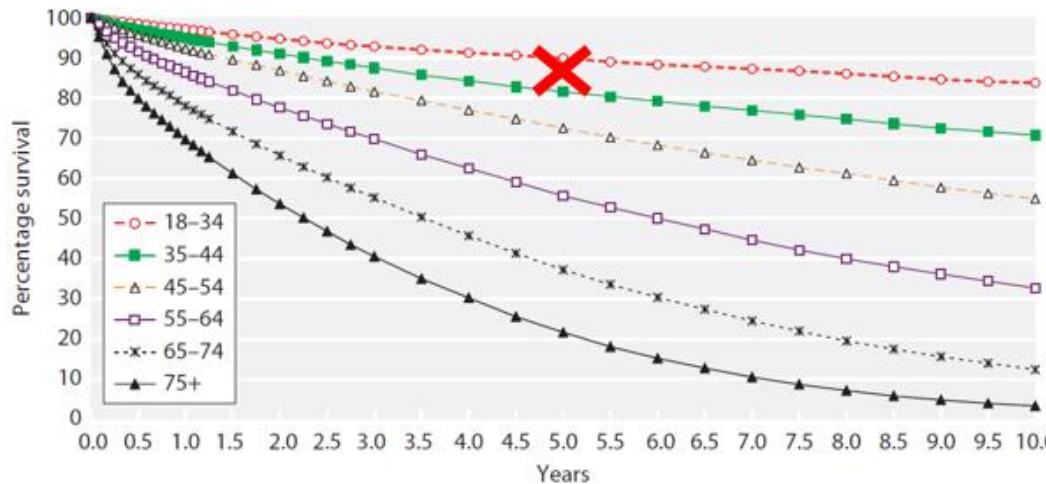
Kidney: robust assessment

- **Surgical review**.... No issues
- **ECG**..... Normal sinus rhythm
- **Chest X-Ray**..... Normal size heart, no fluid overload, no signs of malignancy
- **ECHO**..... EF 30%, otherwise normal
- **ETT**..... No inducible ischemia
- **Virology**: all negative
- **Tissue Typing**:
 - No sensitising events
 - CRF 0%
- PD poor fluid management, line removal due to peritonitis, HDx commenced
- Repeat ECHO.... EF 55%
- ~~MIBI/DSE~~
- ~~Coronary Angiogram~~

Figure 6.4 Risk-adjusted five year patient survival rates for first deceased donor kidney transplants in adult patients, between 1 April 2011 and 31 March 2015



Kidney: contraindications



Absolute contraindications:

- Uncontrolled cancer
- **Active systemic infections**
- Any condition with life expectancy < 2 years

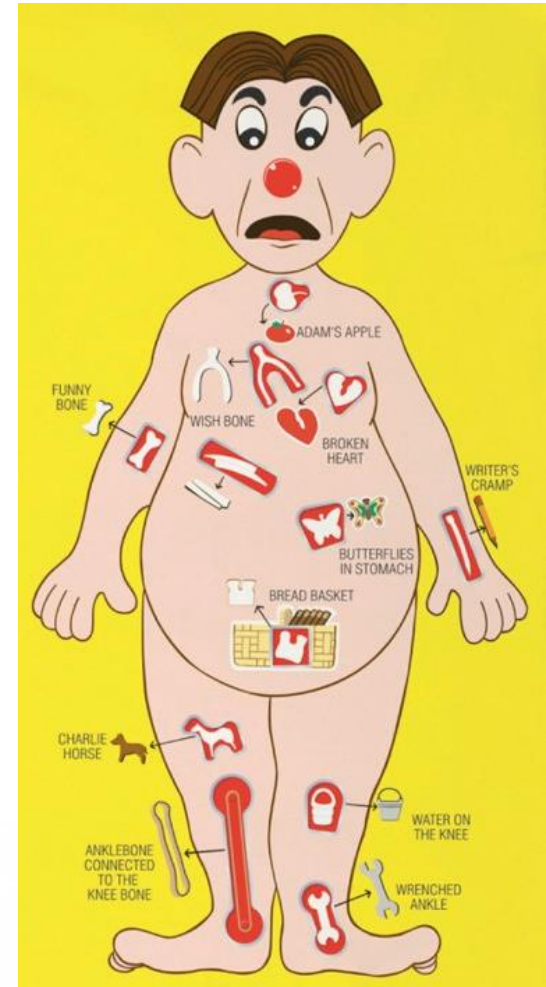
Relative contraindications:

- Predicted patient survival of < 5 years
- Malignant disease not amenable to curative treatment
- HIV infection not treated with HAART or progression to AIDS
- **Cardiovascular disease**
- Predicted graft loss > 50% at 1 year
- Predicted non-adherence to immunosuppressant therapy
- Immunosuppression predicted to cause life threatening complications
- **Raised BMI**

Pancreas assessment:

Stanley...

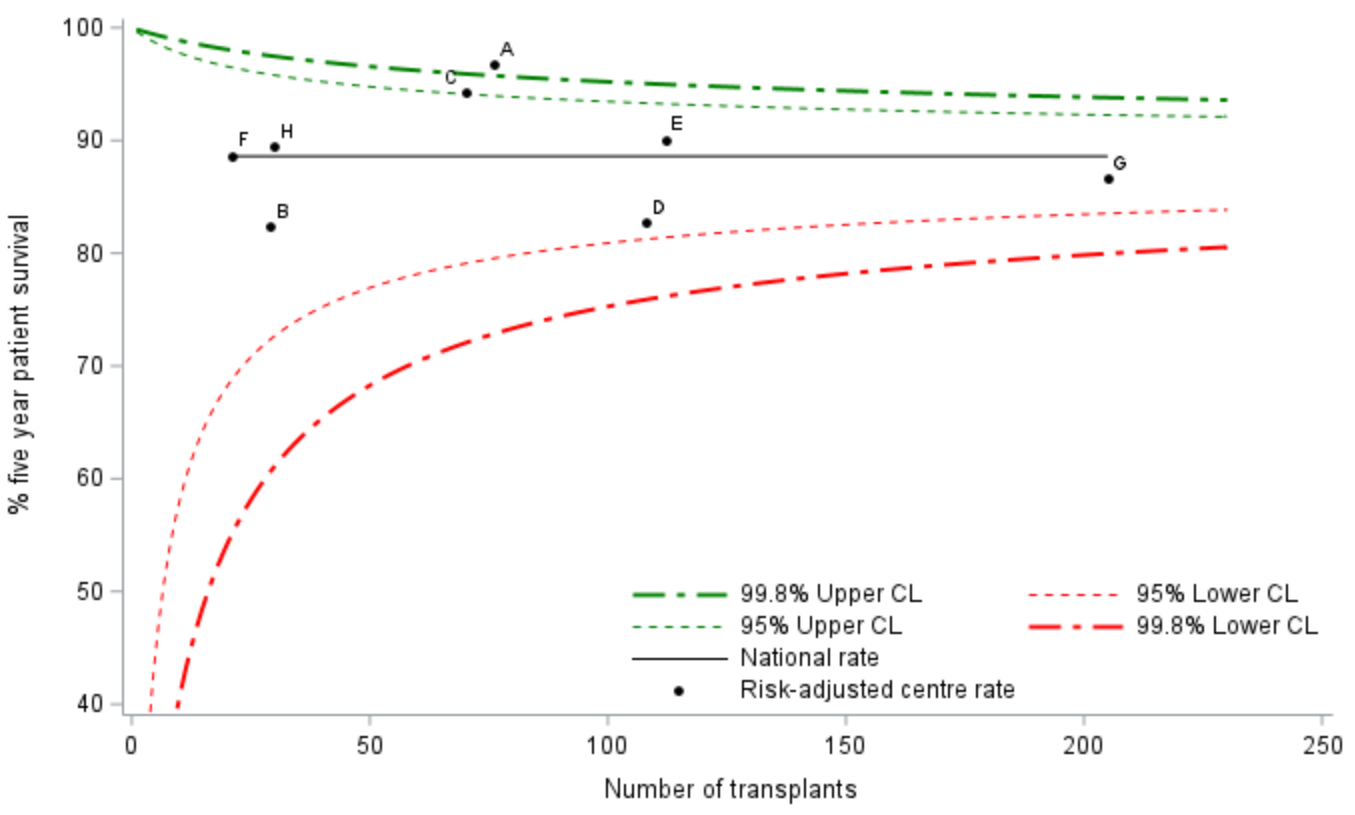
- 35 year old man
- Kidney transplant
- BMI 32
- Drinker and recreational drug use
- Not currently working
- No blood transfusions and no pregnancies
- NODAT post transplant
- Compliance issues:
 - Multiple hypos
 - Erratic tac levels
 - Missed clinic appointments
- Chronic graft dysfunction: eGFR 19



Pancreas: robust assessment

- **Surgical review**.... No issues
- **Pelvic X-ray**.... No calcification to vessels
- CT abdomen..... room to plumb in
- US abdomen... no gallstones
- **ECG**..... Normal sinus rhythm
- **Chest X-Ray**..... Normal size heart, no fluid overload, no signs of malignancy
- **ECHO**..... EF 55%
- **ETT**..... No inducible ischemia
- **Virology**: all negative
- **Tissue Typing**:
 - Previous transplant
 - CRF 15%

Figure 6.3 Risk-adjusted five year patient survival rates for deceased donor first SPK transplants, between 1 April 2012 and 31 March 2016



Pancreas: contraindications

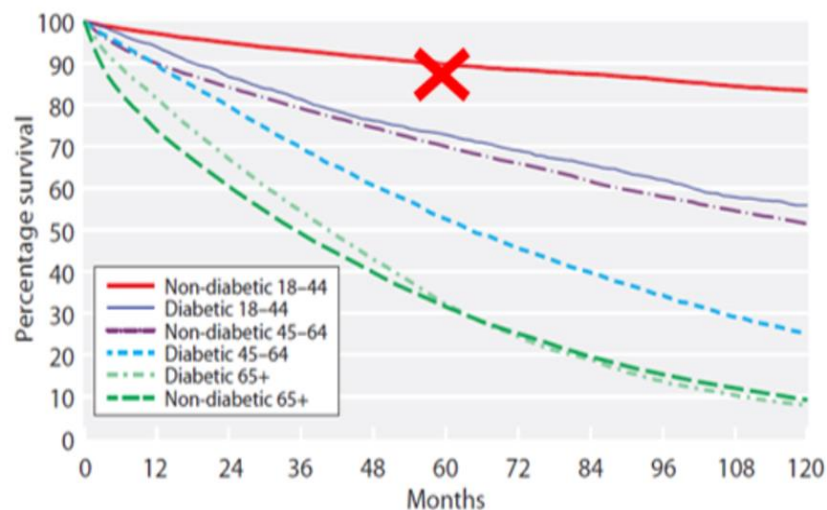


Fig. 5.19. Long term survival for incident RRT patients with and without diabetes by age group, 2004–2013 cohort, followed up for a minimum of three years

Absolute contraindications:

- Excessive cardiovascular risk including:
 - Angiography indicating clinically significant and severe and non-correctable coronary artery disease
 - Recent myocardial infarction (last 6 months)
- Non-curable malignancy
- Active sepsis
- Active peptic ulcer
- **Major psychiatric history likely to result in non-adherence**
- Inability to withstand surgery and immunosuppression

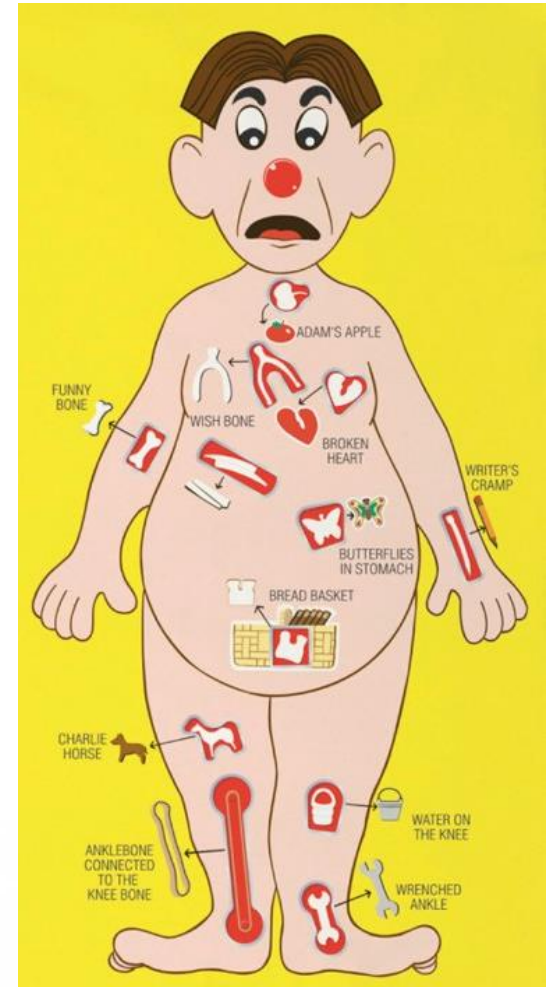
Relative contraindications:

- Ejection fraction below 50%
- Cerebrovascular accident with severe long-term impairment
- Active infection with Hepatitis B or C virus
- **Body mass index greater than 30 kg/m²** (absolute contraindication for PTA and for type 2 diabetics)
- Insulin requirements >100 units/day
- Extensive aorta/iliac and/or peripheral vascular disease
- **Continued abuse of alcohol or other drugs**

Bowel assessment:

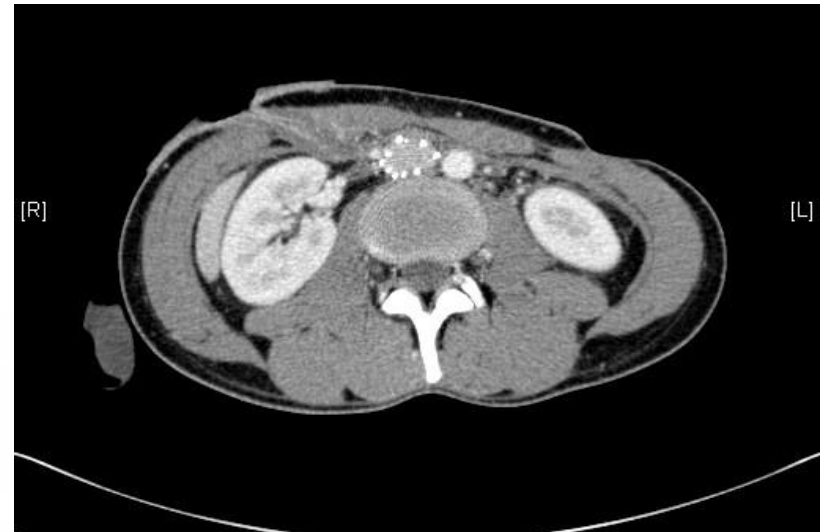
Stanley...

- 43 year old man
- SPK after kidney transplant
- BMI 18
- Drinker and recreational drug use
- Not currently working
- EPS.... Multiple laparotomies and bowel resections
- TPN with short gut syndrome
- Multiple line infections

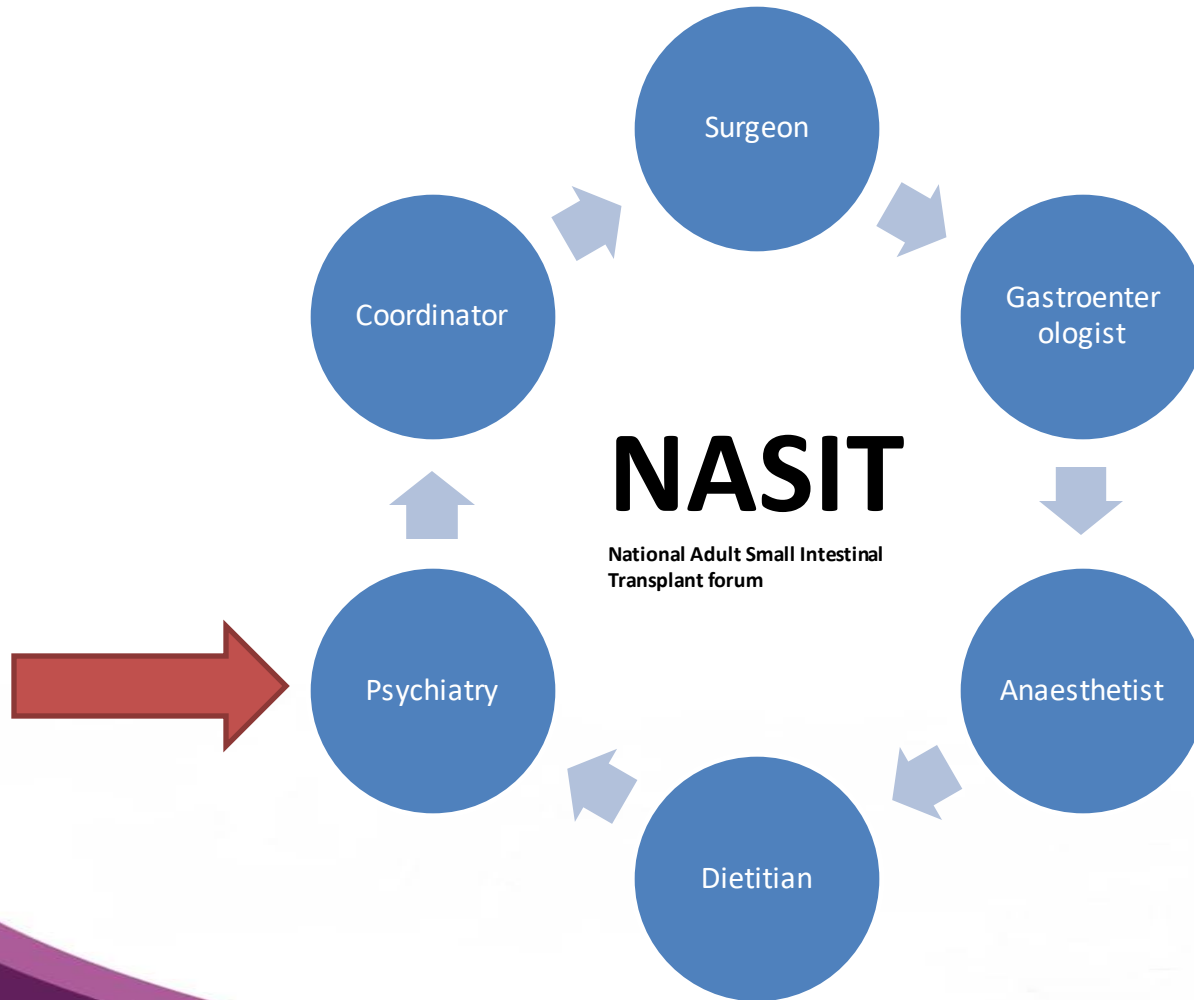


Bowel: robust assessment

- **Chest X-Ray**..... Normal size heart, no fluid overload, no signs of malignancy
- **Surgical review**.... LOTS of issues
- **CT CAP**..... room to plumb in
- **US liver and portal system**... no issues
- **Central vein dopplers**... limited access for further TPN
- **Liver biopsy**... normal
- **Endoscopy**.... no contraindications
- **ECG**..... Normal sinus rhythm
- **ABG**... Normal
- **Pulmonary function tests**... Normal
- **ECHO**..... EF 50-55%
- **ETT**..... No inducible ischemia
- **Virology**: all OK
- **Tissue Typing**:
 - Previous transplant(s)
 - CRF 35%
- **Dental assessment**... Multiple caries



Bowel: assessment



Bowel: contraindications

Absolute contraindications:

- Metastatic malignant disease
- Systemic disease with a poor prognosis
- Severe neurological diseases with progressive impairment

Relative contraindications:

- Active generalised sepsis or severe systemic infection
- Requirement for ventilator support
- Neurological diseases with permanent sequelae
- Insufficient venous access
- Systemic disease with a life expectancy <5 years
- Neoplastic disease with an uncertain prognosis
- Psychosis unlikely to respond to full treatment and result in non-adherence (for adults)
- **Patients unlikely to adequately comply with post-small intestinal transplant treatment, including inadequate social support, particularly poor social circumstances, or personality disorder with 'at risk' behavior**
- Age above 60 years

Bowel: chances of surviving the operation

- High risk....

Table 6.4 Unadjusted patient survival (%) for adult first intestine transplants between 1 April 2009 and 31 March 2019, by transplant type

| Transplant type | Number of transplants | 90-day survival (95% CI) | | 1-year survival (95% CI) | | 5-year survival (95% CI) | |
|----------------------------------|-----------------------|--------------------------|--------------------|--------------------------|--------------------|--------------------------|--------------------|
| Cambridge | | | | | | | |
| Including liver | 48 | 87.5 | (74.3-94.2) | 73.4 | (57.8-84.0) | 26.1 | (9.1-47.1) |
| Not including liver ¹ | 34 | 100.0 | - | 83.6 | (65.0-92.8) | 74.8 | (53.7-87.4) |
| Oxford | | | | | | | |
| Not including liver ¹ | 45 | 88.6 | (74.7-95.1) | 80.5 | (64.5-89.8) | 56.9 | (36.6-72.9) |
| TOTAL | 127 | 91.3 | (84.8-95.1) | 78.5 | (69.9-85.0) | 51.4 | (39.5-62.1) |

¹ Includes intestine only