Surgical aspects of heart transplantation

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Donor assessment (new)
Dr. Graham, Dr. Greg, Dr. Hussain, Dr. Jaco, Dr. Larry, Dr...

Evening, referral from Kwa Zulu natal, life Hilton hospital, 73 y old male pt, admitted on 2nd Nov, spontaneous subdural bleed, GCS 3 on arrival and after theater, blood group O neg HT 1.87, WT 95, chest circumference 118, Known hypertensive patient, non smoker, non alcoholic, nil blood or urine infections, EColi and candidiasis cultured in sputum sample on admission. BP 180/60. Trandate infusion running @ 30mls/hr@ 200mgs / 200mls - 1mg/ml. 12 lead ECG done, cardiac echo done. FiO2 test not done. Ventilated on SIMV, rate 18, FiO2 60, PEEP 10. Psudo 5. no secretions
Donor assessment (new)

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30mls/hr @ 200mgs / 200mls - 1mg/ml.
12 lead ECG done, cardiac echo done.
FiO2 test not done. Ventilated on SIMV, rate 18, FiO2 60, PEEP 10, Psupp 5, no secretions noted as yet, sodium is 140. All virals neg. Results to follow.
Indications

• Heart failure
• Ischemic heart disease
• Intractable arrhythmia
• Hypertrophic cardiomyopathy (HOCM)
• Congenital heart disease
• Cardiac tumor
Contra-indications:

- Age > 70 years
- Fixed pulmonary hypertension
- Life threatening, life-limiting illness
- Sepsis
- Active peptic ulcer
- Continued abuse of alcohol or other drugs
- Irreversible secondary organ failure
- Diabetes with end-organ dysfunction; Multisystem SLE/sarcoid
- Psychiatric history (non-compliance)
- Malignancy
- Lack of psychosocial support
Transplant 31/10/17
Dr Graham, Dr Jaco, Dr Kaveer, Dr Martin, Dr Nachie,...

Gail Peggs
How is Dr Botha coming across, his car or the response car
07:40

Ask him please, Gail 07:41

Gail Peggs
Will do so 07:41

Dr Martin Sussman
What's the delay. Both patients should be in theatre by now.
07:43

Tasha Meredith
On our way to theatre now 07:43

Dr Martin Sussman
We must cut by 8:30. 07:44

Gail Peggs
You can't send messages to this group because you're no longer a participant.
Donor

• Ideal
  – < 45 years
  – LVEF > 40%, no inotropes
  – No valvular or coronary artery pathology
• (Alternate list provides less optimal donor hearts from patients > 55 years of age, with valve disease or coronary artery disease – repaired on the day)
• Ischemic time of < 4h
  – geography
• ABO compatible
• Donor body weight
  – within 30% of recipient (females)
  – Within 20% (males)
Transplant 31/10/17

Dr Graham, Dr Jaco, Dr Kaveer, Dr Martin, Dr Nachie,...

Lungs look good, no lumps noted on palpation 10:03

Opening to look at the heart now 10:06

Dr Steph Fischer
Ok all good 10:07

Gail Peggs
Heart is good, no coronary lesions noted, no wall abnormalities noted 10:15

35 000 units heparin given 10:16

Cross clamped 10:29

Amended cross clamped time 10:31

Let is know when the thoracic return to gas 10:31

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Donor harvest
Donor harvest
Myocardial protection and transport

- Expedious
- Cold protection
- Timed operation
Transplant 31/10/17
Dr Graham, Dr Jaco, Dr Kaveer, Dr Martin, Dr Nachie,…

Amended cross clamped time
10:31

Let is know when the thoracic organs are out please
10:50

Gail Peggs
Heart is now our
Out
Lungs are out
Busy with back table
The heart and lungs are leaving union

Dr Jaco Botha
Left union.

Good heart and lungs.
11:22

Sr Aruna left

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Recipient implantation
Recipient implantation
Recipient implantation

Anastomosis of pulmonary artery

Anastomosis of aorta
Post implantation

• Rest and reperfusion
• Weaning from cardiopulmonary bypass
• Hemostasis and optimisation
Transplant 31/10/17
Dr Graham, Dr Jaco, Dr Kaveer, Dr Martin, Dr Nachie, ...

Dr Steph Fischer
Will be in ICU with heart in 40 mins.

Dr Paul Williams
Well done

Dr Graham Cassel
How is the lung doing

Alvin
Lung in icu. off ecmo

Dr Graham Cassel
👍

Both transplants looking so far so good

You can't send messages to this group because you're no longer a participant.
Transplante Cardíaco
Instituto do Coração
Hi there, I am an anaesthetist in East London and just looking for someone who may have follow up for us on the recipient of a heart that was harvested from one of our patients on Friday. Jaco Botha did the harvest. Might you perhaps please be able to help? Thank you.

Georgina Westcott
Hi Agneta, thank you so much for that wonderful feedback. It almost had me in tears! Very happy to hear that. All the best, Georgina

What was probably a tough and emotional day in East London turned into a very happy day for a whole family in Johannesburg. Last night at visiting time, I had to keep 8 family members from wanting to go into the cardiothoracic ICU at once👍
Thank you

Especially to the donors and donor families