



Sub-Internship at UCSD Cardiothoracic Surgery

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About Sulpizio Cardiovascular Center

- Top 50 programs in the nation for cardiology and cardiothoracic surgery
- Coronary artery bypass grafting
- Heart valve repair and replacement
- **Pulmonary thromboendarterectomy (PTE) 200~ per year**
- Heart and lung transplantation
- Implantation of ventricular assist devices



What is a Sub-Internship

Sub-Is are

- 4 week away rotations where senior medical students demonstrate clinical skills to obtain good Letter of Recommendation.
- Learning experience to become a good intern.
- Getting a taste of your specialty of interest.

What do Sub-interns do?

Depends on department of specialty as well as institution... but

- See patient and write notes
- Present to attending and propose a PLAN
- Scrub in for surgical cases
- Help residents with patient care;
i.e. change wound pack, remove chest tubes, consult.

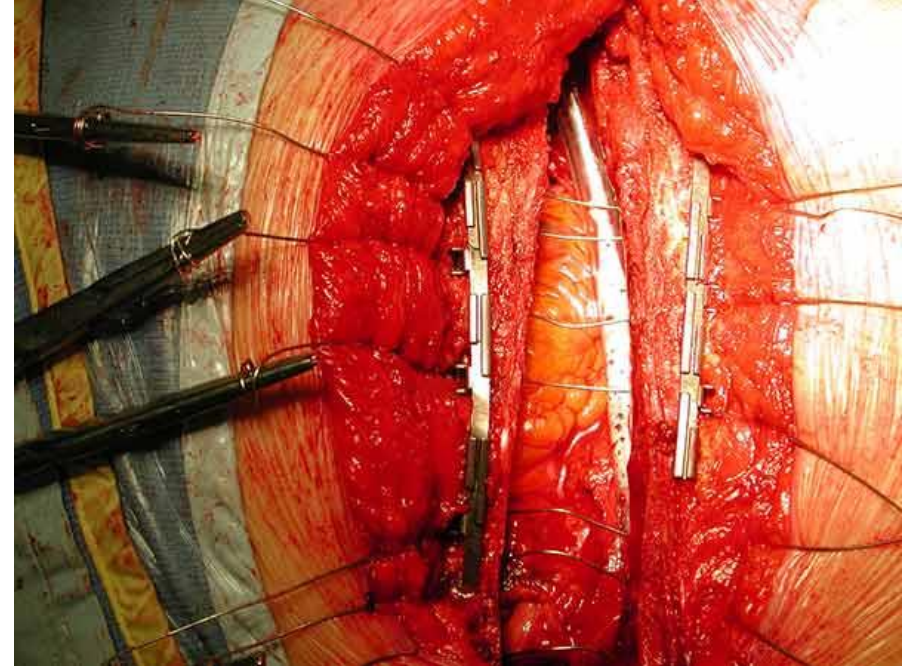
My Daily Schedule

- 4:30 wake up
- 5:15 Start pre-rounds
- 6:30 Help in OR
- 7:00 Scrub in
- 13:00 maybe lunch, 2nd Operation
- 18:00 help resident, PA, fellow with floor
- 20:00 go home if no more op



What I did in the OR

- Position Patient
- Sterilize Patient
- 2nd assistant.
 - Closing Saphenous Vein Graft wound.
 - Assisting Cardiopulmonary bypass
 - Chest Tube placement
 - Suture Pace Wires on to skin
 - Closing wound. Sternum wires. Continuous Subcutaneous Suture.



What else did I do?

Sternotomies x 3



Case Report in front of Faculty

Case report of severe protamine reaction during Hemi-sternotomy AVR

McAndrew Merlini

UCSD Cardiothoracic Surgery Visiting Medical Student

Patient Overview

A 53 year old male PMH significant for severe aortic stenosis and no coronary artery disease with progression to daily symptoms of shortness of breath presents for surgical treatment.

Pre-op evaluation

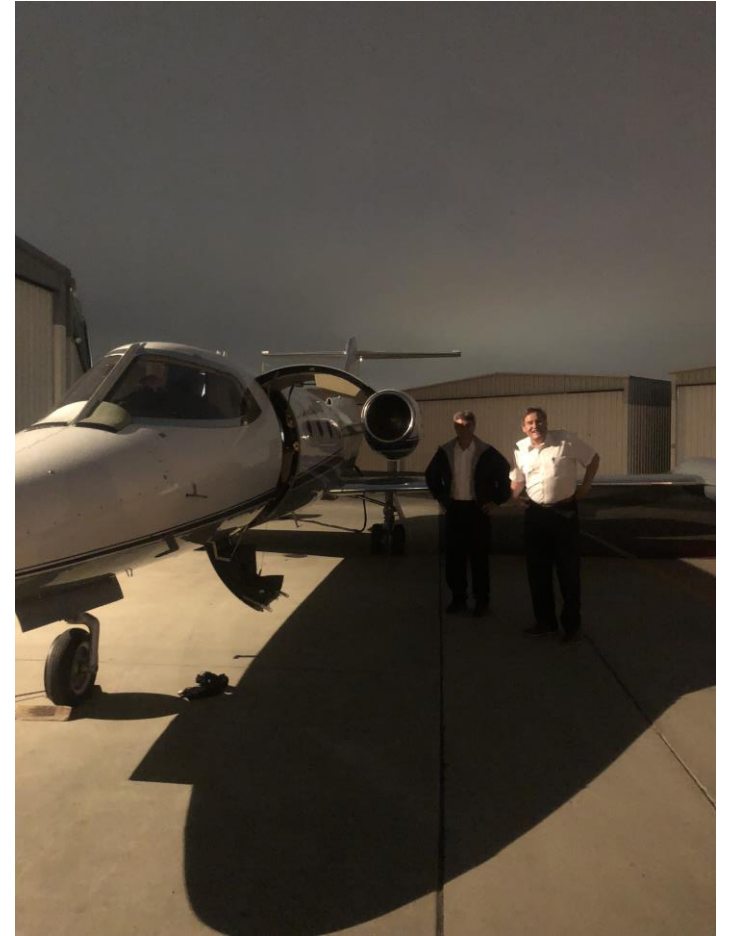
- NYHA classification III
- ECHO: EF 60-65%, no WMA, AVA 0.8cm², mean gradient 65mmHg, Vmax 6.5 m/sec.
- CAG: RCA is dominant vessel. PDA 20 % stenosis. No significant CAD detected.

Hemi-sternotomy AVR

- Hemi-sternotomy.
- Heparin 52000 Units allowed ACT to rise to 420s.
- AV examination showed heavily calcified bicuspid valve.
- AV replaced with 23mm Mechanical On-X valve.
- Cross-clamp time 138 min.
- At 10% (50mg) of protamine administration, profound hypotension, increased peak airway pressures, increased PA pressures was acknowledged.
- Epinephrine and Diphenhydramine showed minimal improvement of BP.
- Decision to go back on CPB for 14min. Additional heparin 10000 Units and cortisol were given.
- Minimal increase of Tryptase 7.7 suggested anaphylactoid reaction to protamine.
- 8 hours later ACT decreased to 120s. Blood products given showing minimal improvement of bleeding. Wound closure attempted. However bleeding through chest tube was high leading to reopening and temporary packing of wound.
- The next day patient was taken to OR for sternum wound closure. Patient is doing well so far post operatively.

Went to Stanford to Get A Heart

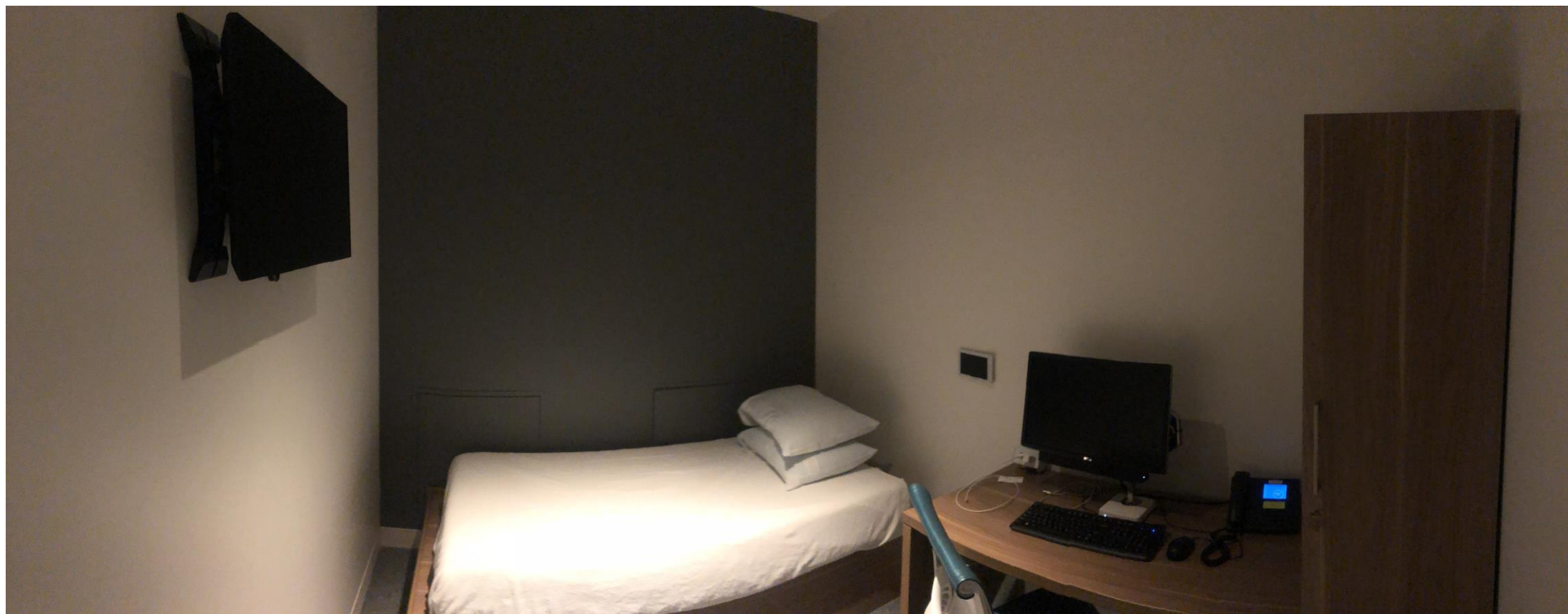
- Met up with driver at Sulpizio at 1AM!
- Hopped on privet jet and took off.



- Procurement started at 3AM
- Little delay from other surgeons
- Left Stanford at 5 AM



Drew, Get Some SLEEP!



Work HARD Play HARD!

- Party at friend of friends house
- After 1 AVR and 1 CABG
- Next day back to hospital at 5AM



A little Sight Seeing



TO SUM UP

CABG ON/OFF	11	NOTEs	28
AVR+-CABG	10	Consults	4
PTE	6	Chest Tube removal	5
TAVR	2	Pace wire removal	2
MVRepair	2	Sternotomy	3
MVReplace	2	Wound suture	15
PVR	2	Case Report	1
HEART TXP	2		
LVAD removal	1	Letters of Recommendation	2+
BENTALL	1		
LUNG TXP	1		
Tissue Graft Micro SURG	1		
LEAD removal	1		
VATS	1		
TOTAL	43		

A little introduction before we end

- Dr. Yuichi Ishida
- Residency in Jichiika Univ.
- General Surgery residency in Texas
- 7 months into Fellowship at UCSD
- 200+ CT surgeries/year
- Surfer!



A sunset over the ocean with silhouettes of people on a beach. The sun is low on the horizon, casting a golden glow across the sky and water. The beach is visible in the foreground with several people standing and walking. The overall scene is peaceful and scenic.

Special thanks to,

- 医学教育推進課 医学国際化等担当の皆様
- 横浜市立大学およびUCSDの職員・先生の皆様
- 横浜市立大学医学部医学科同窓会倶進会、医学部後援会 の皆様