Algorithm for Hepatopulmonary Syndrome:

The flow of care was divided into building block for the various phases of transplant care. There are well accepted oxygenation limits that define steps in the flow of care. I am not sure how those are modified by our altitude. We need a consensus on all the oxygenation values used in this protocol. We will have to adopt pre-existing limits for MELD upgrade points even though these have not been altitude tested.

We will use this report to support requests for upgrades in our HPS patients.

We have written our pulmonary hypertension attendings into the postoperative STICU care. The STICU resident should call you with a report when patient arrives in the unit.
Sitting SaO2 < 90+IPVD

Sitting ABG

PaO2 < 50
Not a candidate

PaO2 50-80 + A-a> 15
Pulmonary Hypertension Clinic
Pulmonary hypertension clinic

r/o hypoxemia due to coexisting disease

Pulmonary evaluation

+/− MAA study

>6% over brain = positive

r/o large IVPD

oxygen shunt study/CT imaging

coil embolization

Grade severity of HPS

Mild PaO2 ≥80

Moderate PaO2 60-79

Severe PaO2<60
Diagnosis of HPS

Upgrade
PaO2 < 60
F/U Hepatology every 3 months

Stable
PaO2 60-80
F/U Hepatology Clinic every 6 months

Sitting ABG on Room Air

Frailty Score

6 minute walk test

Sitting SaO2
Organ offer

Sitting SaO2<82 on r/a

Sitting ABG

PaO2< 50
Cancel

PaO2 > 50
Proceed
Intraoperative

Positioning
Supine or trendelenberg

- Hb 10-11
- CVP 8-10
- FIO2 1.0

PaO2 < 80
- Nitric Oxide 20-40 ppm
- Consider ECMO

PaO2 > 80
- Aim for early extubation
Admit STICU

Wean if on vent
PaO2>80: FIO2 .6

Extubate if PaO2>60:
FIO2 .3

Discharge criteria
PaO2>60/SaO2>85% 2-4L n/p

Patient position supine
Hb goal 10-11
CVP 8-10

STICU resident calls report to pulmonary hypertension attending