Initiation HFJV

HFJV PIP = 3-5 cm H2O > CMV

MAP = Same or 1 above CMV

HFJV Rate = 360

**Consider 300 if severe PIE or hyper expansion are present

Oxygenation

Inadequate

FiO2 ≥ 0.6
AND
Atelectasis
OR
Underinflation on CXR

Add sigh breaths
PIP 6-8 above PEEP
I-time 0.4-0.5
RR 4

After 60 min:

FiO2 ≥ 0.6

SpO2 < 90%

Atelectasis/underinflation on CXR with no progression

1. Increase PEEP by 1 (**Maintain same ΔP if ventilation adequate)
2. Sigh breaths:
   a. Increase PIP by 2 **AND**
   b. Increase I-time by 0.1-0.15 sec

Continue above increases in sigh breath PIP and I-time as needed until saturations, FiO2 requirement, and atelectasis resolves

****Suggested max PIP 30**

Adequate

Wean PEEP by 1 for goal sats and/or FiO2 < 0.35

Within Goal Sat Range

FiO2 < 0.4

Turn sigh breaths off and increase PEEP by 1-2 to maintain MAP achieved with sigh breaths

**Follow adequate oxygenation arm for goal sats and/or FiO2 < 0.35

Ventilation

Adequate

Wean HFJV PIP by 1-2 cm H2O

Wean valve time if greater than 0.026 (wean PIP by 8 before valve time wean)

Continue to wean HFJV PIP maintaining goal pH/PaCO2

Inadequate

↑ HFJV PIP by increments of at least 2 cm H2O until PaCO2 < 60 and pH >/= 7.28

If HFJV PIP 35-40 consider increasing HFJV valve time

Evaluate for hyperinflation and adequate I:E (about 1:6 or greater)

↓ HFJV rate by increments of 60 to avoid hyperinflation and provide adequate time to exhale based on physiology of lung disease

****Hyperinflation: treat with longer exhalation times**

- **↓ HFJV rates for longer exhalation phase**
- **May need to allow for permissive hypercapnia**

Reviewed July 2023 / Nora Norwood RTT / Karen Wood MD