

In The Name of God

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Surgical Treatment of Acute Pulmonary Emboli In Pregnancy

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* Acute Pulmonary Emboli is occupation of Pulmonary vasculature by clot.

* Pain- Fever- Tachycardia- Dyspnea-

Anemia

* Hypoxia- Cardiogenic Shock and Arrest

Diagnosis of PE:

* Lab: CPKMB- Troponin I - D Dimer-

NU Peptide

* Imaging: CT- MRI- Scan- Angio

* Echo: TTE- TEE

Acute Pulmonary Emboli:

- * Mild PE

- * Massive PE (Obstruction of over than 50% of pul. Vas.)

- * Sub Massive PE (the most common mismanage PE)

Often managed with repeated Echocardiography
(High PAP- RV Dysfunction- TR- Obvious Clot)

Treatment of Acute Pulmonary Emboli :

- * Anti coagulant therapy: Heparin or LMWH or fast acting non heparin anticoagulant (argatroban)

- * Fibrionlytic therapy

- * IVC of SVC filter

- * Catheter Embolectomy

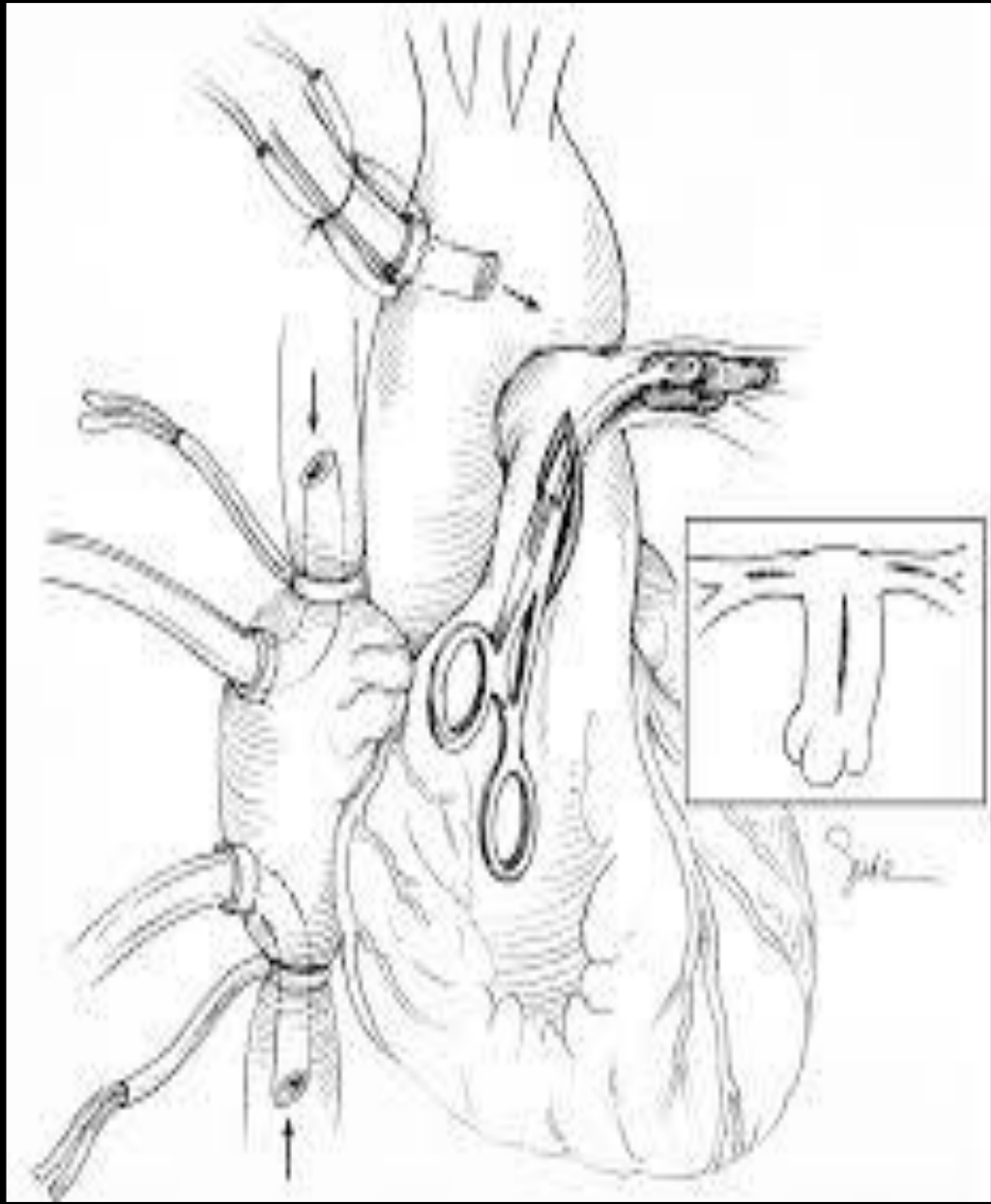
- * Surgical Embolectomy

Indications of surgical Embolectomy:

- * Failure of Anticoagulant and Fibrinolytic therapy if clot detected in heart or Extra Pulmonary PA

- * Sub Massive PE Without Response to Anticoagulant and Fibrinolytic therapy

- * Massive PE if PFO or clot detected in heart or PA



History of surgical pulmonary Embolectomy:

- * Cardiac surgery is very young course of surgery
- * A few cases are in interment review of literature
- * Surgery can severely decreased mortality and morbidity of massive and sub massive PE.

Surgical Treatment of Acute Pulmonary Emboli in Pregnancy:

1- Anti coagulant therapy (Heparin or LMWH or fact acting non Heparin)

2- Fibrinolytic therapy ????

3- Catheter thrombectomy ??

4-Surgical thrombectomy in massive or sub massive PE with clot in heart or extra PA branches:

*** Viable fetus age:**

- Cesarean Section and Embolectomy
- Embolectomy alone

*** Non viable fetus age:**

- Embolectomy

Extra Corporeal membranous oxygenation (ECMO)

Cardio help



Indications of ECMO:

- * Acute massive or sub massive PE
- * Acute MI (Cardiogenic Shock)
- * Contusion Lung (Lung Trauma)
- * Catastrophic Events in Angiography Room
- * Post cardiac Surgery Heart Failure