

大阪北区病診連携委員会 2021 Nov.24

# 低侵襲性心臓手術

(僧帽弁 / 大動脈弁 弁膜症症例への取  
り組み)

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# 低侵襲心臓手術の定義

1. 大きな胸骨正中切開で行う心臓手術を、出来るだけ小さな皮膚切開で行う手術



MICS

2. 人工心肺を使用しない手術



OPCAB, TEVAR

MICS: Minimally invasive cardiac surgery

# 右小開胸低侵襲心臓手術のmerit

1. Small incision
2. Small wound pain
3. Little bleeding
4. Small risk of transfusion
5. Short hospital stay

# Overview

Patient Selection

Patient Positioning and Set-up

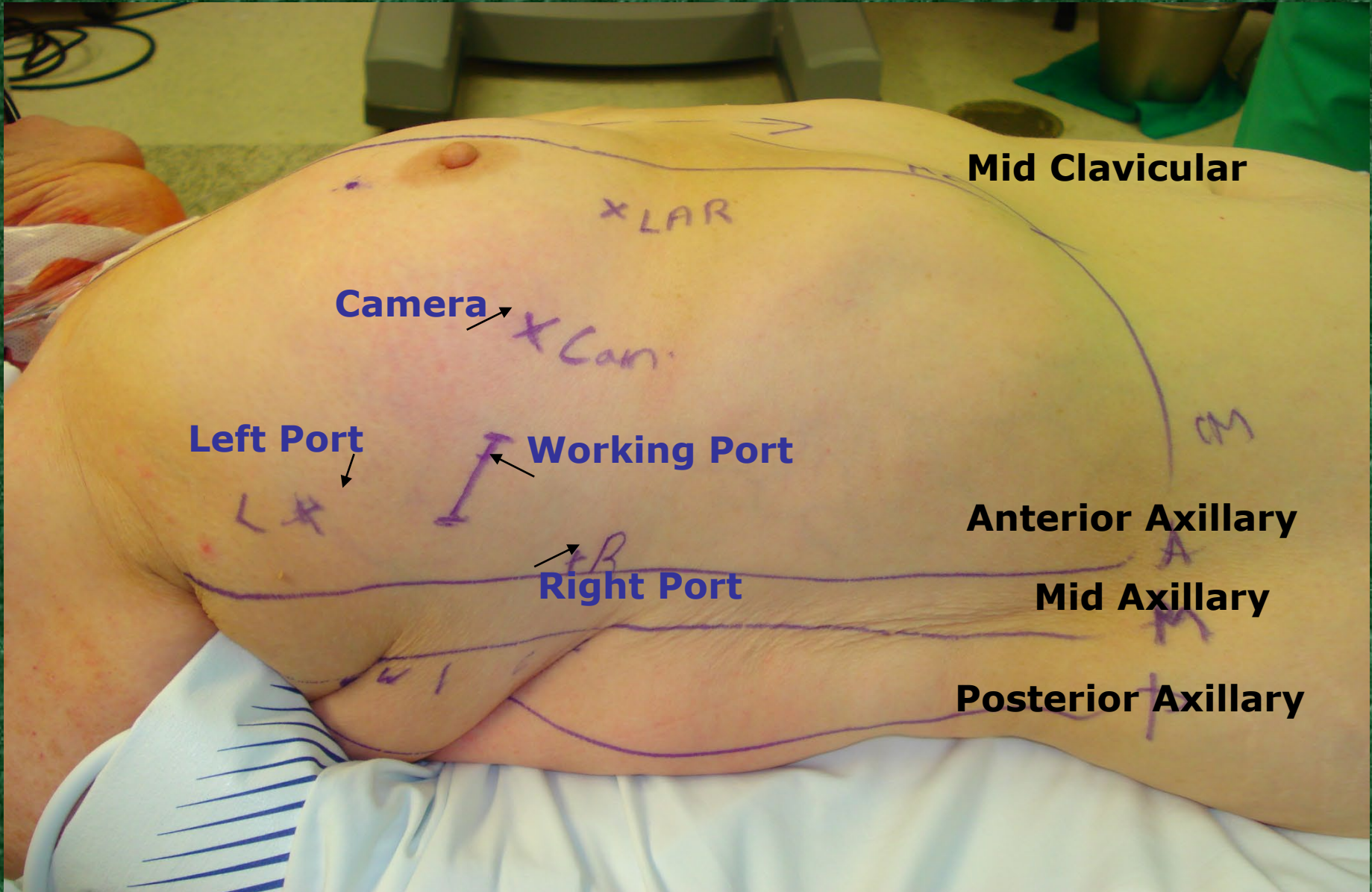
Cannulation and Perfusion

Approach

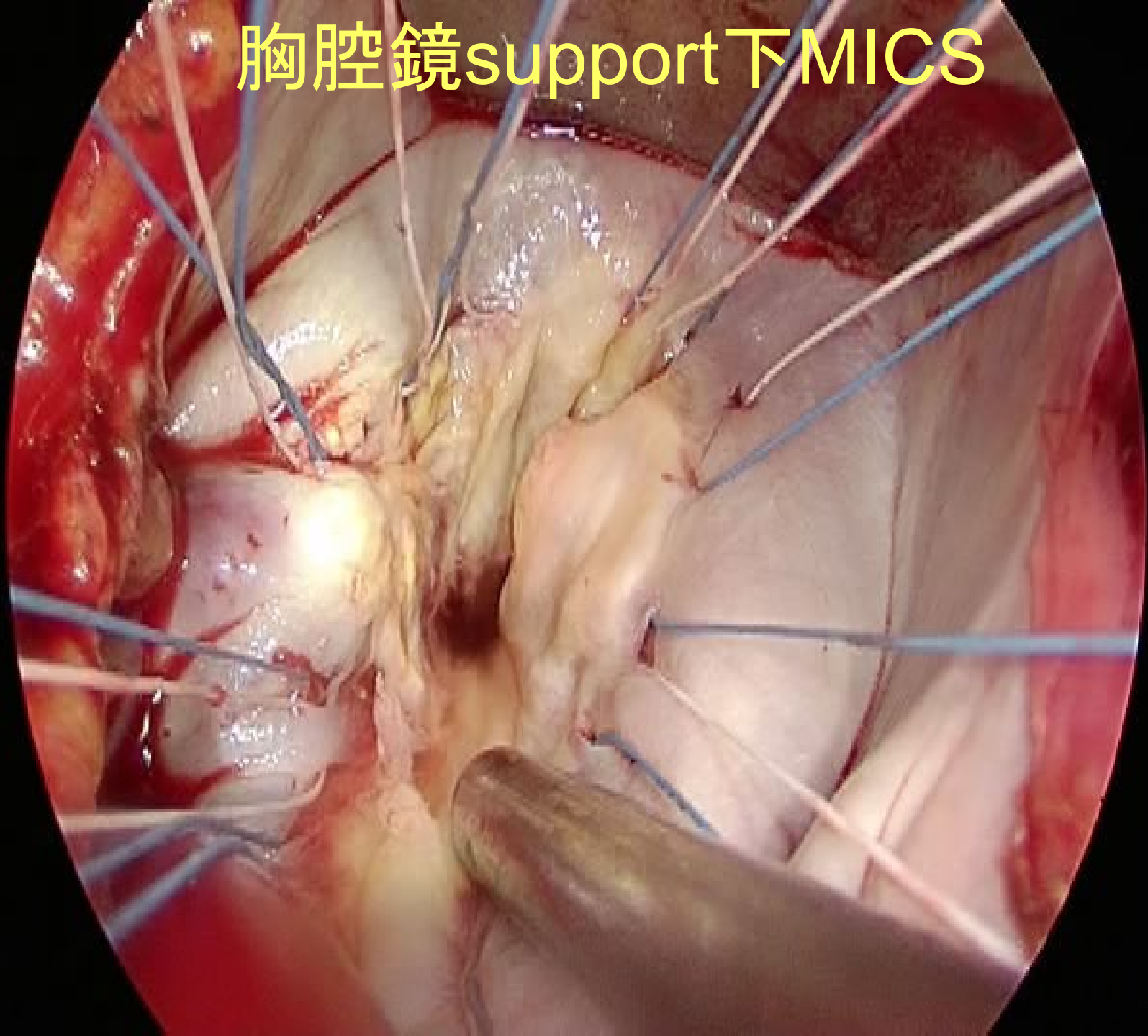
- Direct Vision

- Ports

# Patient Set-Up



# 胸腔鏡support下MICS



**MICS-AVR**

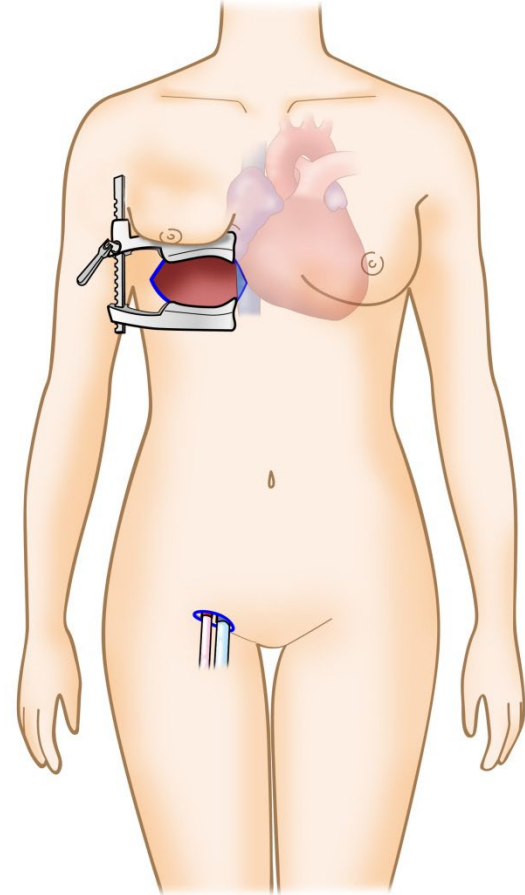
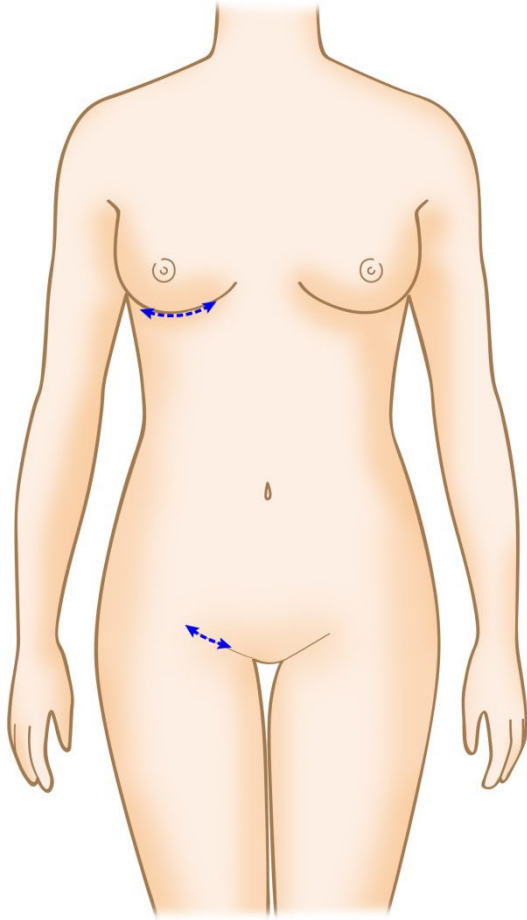


59歳、男性。MICS-AVR for AR on 12/4/2019



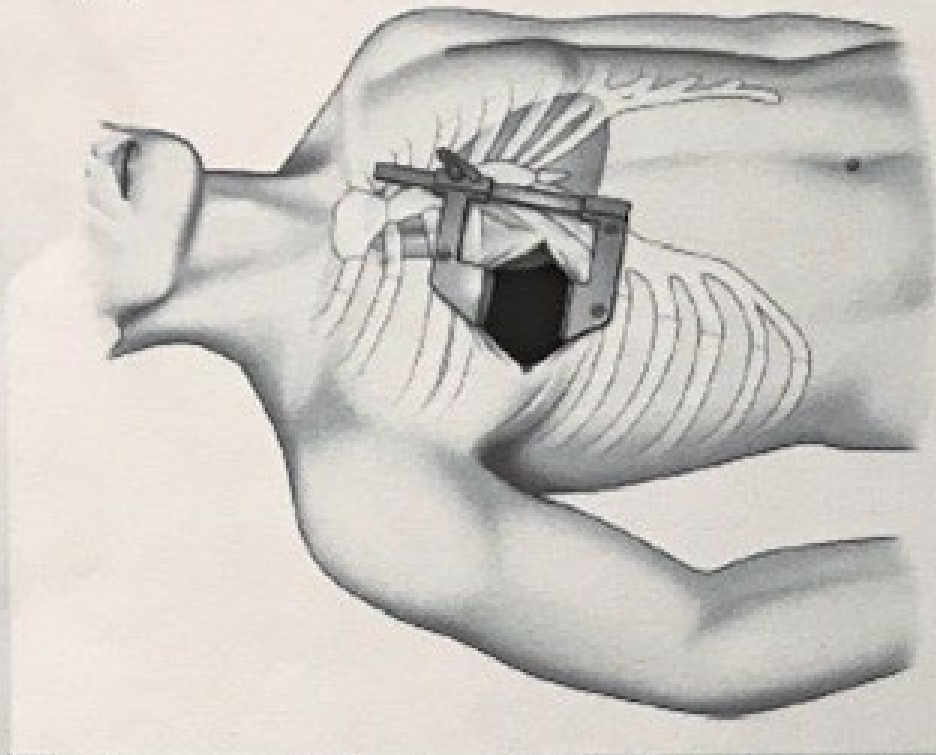


# MICS 手術scheme

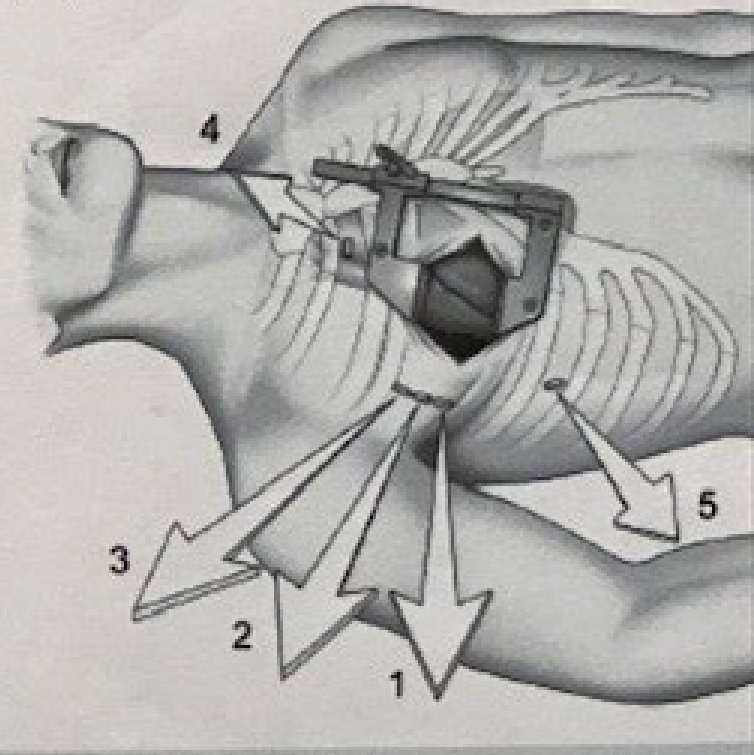


# Impact of MICS MVP via Superior trans-septal approach

(A)

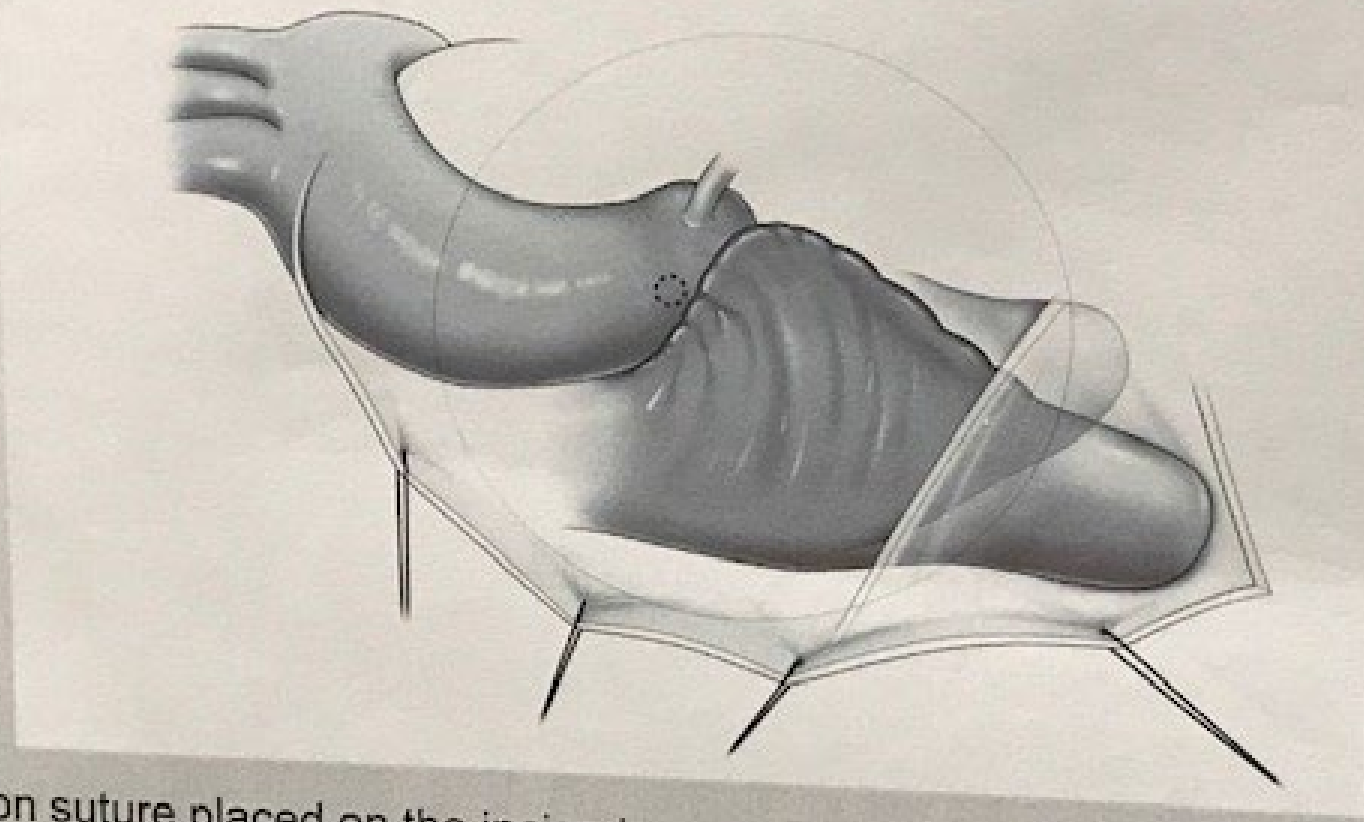


(B)



A. A disadvantage is the distance between the skin incision and mitral valve.

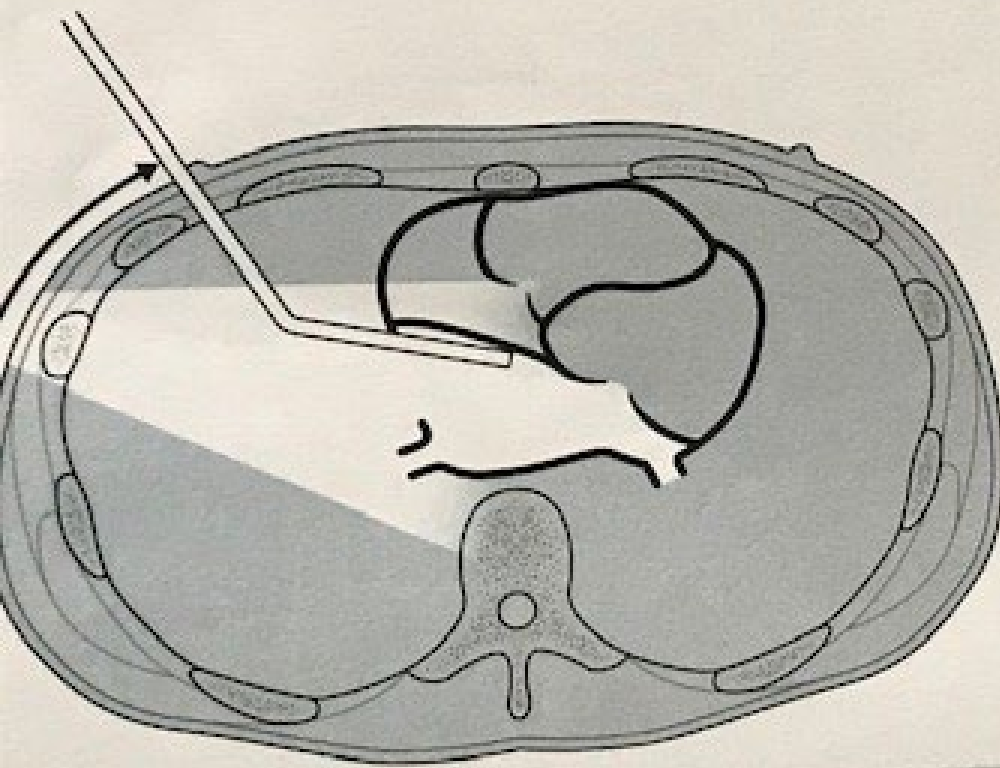
B. The pericardium is pulled up by five 2 - 0 braided polyester sutures to the right chest wall. The numbered arrows represent the order to pull the pericardium. The white arrow indicates the direction and force applied to the retraction suture.



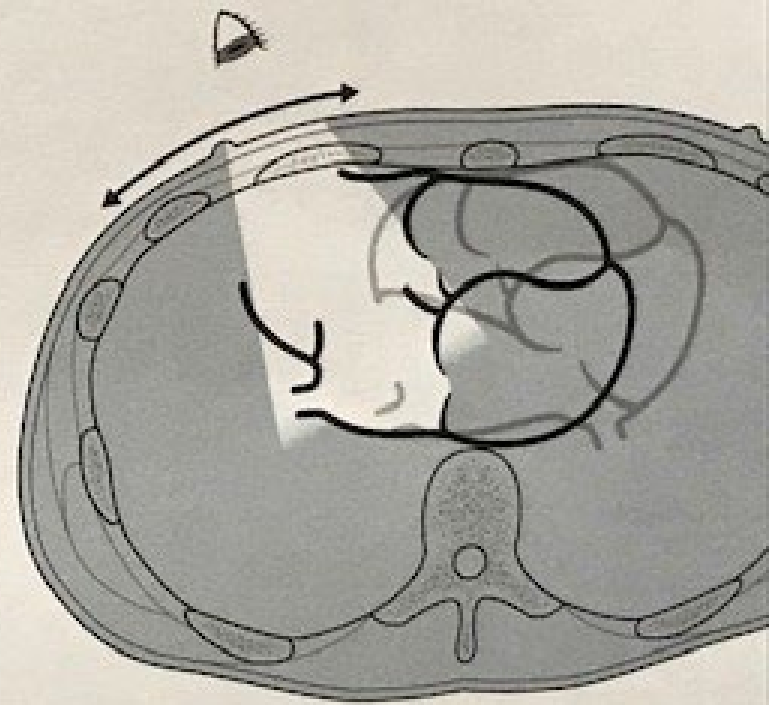
er, a retraction suture placed on the incised caudal pericardium is pulled to the anterior axil  
th intercostal space; while pulling down the diaphragm to the caudal side, the inferior vena  
d down. If the vertical axis from the superior vena cava to the inferior vena cava is stretched  
m also becomes stretched.

# Impact of MICS MVP via Superior trans-septal approach

8-9 cm surgical wound in the right frontal chest. The incision line is slightly moved toward the superior trans-septal approach compared with the traditional right-sided left atrial incision approach



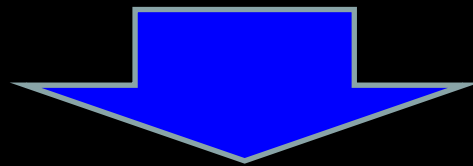
Right-sided left atrial incision



Superior trans-septal approach

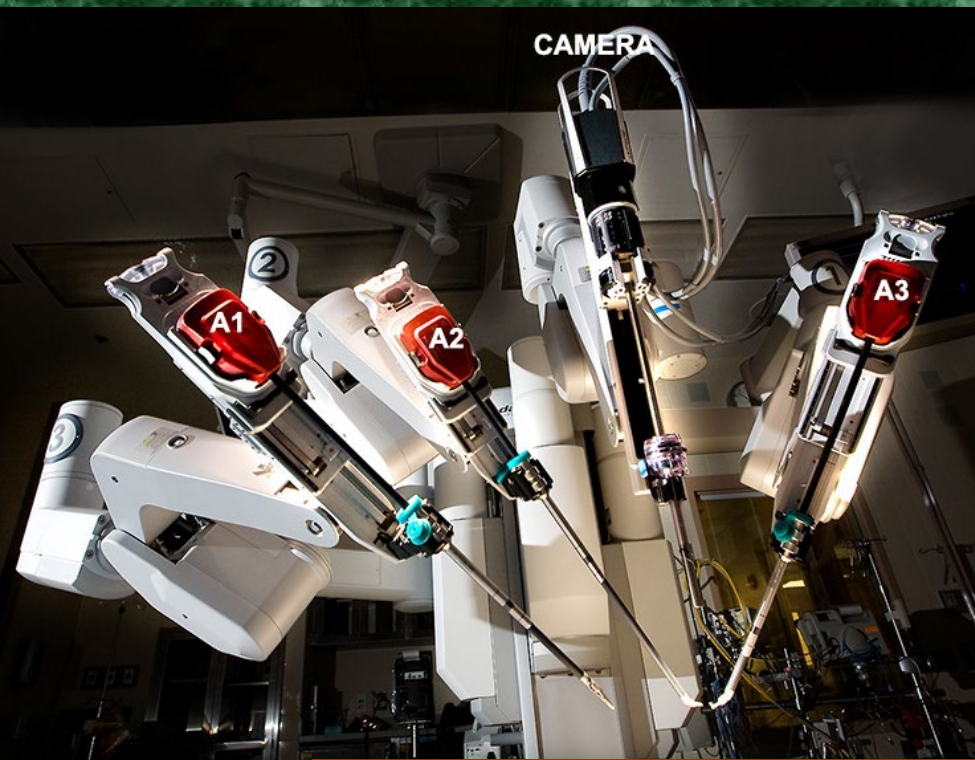
# Patient selection (適応)

- 複雑病変で無い単独MR症例  
(人工腱索を使用しないMR症例)  
(TR、chronic Af合併症例は除く)  
(扁平な胸郭症例も除く)
- 若年AR症例



- 今後はMRは適応拡大へ  
(complicated MR, Barlow以外のMR)

# 新病院転院後、将来的に.....



**Robotic MICS-MVP**

宜しくお願ひ致します。

お疲れ様でした