Maxillary Sinus Puncture (Antral Washout)

Concept: The maxillary sinus is irrigated with a saline solution by a cannula introduced through the inferior meatus. The solution circulates inside the sinus cavity and comes out together with accumulated discharge through the natural ostium in the middle meatus.
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- **Indications:** *(Uncommonly done now)*
  - Diagnostic:
    - Proof puncture.
    - Culture and sensitivity study.
    - Cytological study.
  - Therapeutic:
    - Chronic infective maxillary sinusitis.
    - Dental maxillary sinusitis.

- **Technique:** The wash out is done with a special trocar and cannula under local surface anesthesia using sterile saline solution.
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- The point of penetration, in the inferior meatus, is about 2 cm behind the anterior end of the inferior turbinate. The trocar is directed upwards and laterally toward the outer canthus. The sinus is then aspirated and irrigated.

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**Difficulties:**

- Difficult introduction:
  - Wrong site.
  - Thick sinus wall.
- Difficult syringing:
  - Needle in close contact with posterior sinus wall.
  - Obstructed ostium.
  - Needle inserted into a polyp or cyst.
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- **Complications:**
  - False passage into cheek or orbit leading to emphysema or extravasation of fluid into the cheek, the lower eyelid, or orbit. Treatment is by hot fomentations and antibiotics.
    - Vasovagal attack.
    - Bleeding due to injury of the inferior turbinate.