Skull Osteoma Removal with the Ultrasonic Bone Aspirator
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Background
- Osteomas, the most common tumors of the skull, can be surgically excised using a number of techniques.
- In this case report, we present our experience with the Sonopet ultrasonic bone aspirator (SUBA) in the excision of a frontal sinus osteoma.

Case
- 34 year old male with a frontal sinus osteoma status post frontal sinus fracture presented with pain and discomfort above the orbital rim.
- He elected to have the osteoma removed using SUBA.

Methods
- Incision was made along the upper margin of the eyebrow on the right side and dissected down to the level of the frontalis musculature.
- The frontalis muscle was divided laterally and medially, and the supraorbital nerve was identified and preserved in its neurovascular pedicle.
- The periosteum was elevated off the osteoma.
- SUBA was used to remove the osteoma to the level of the frontal sinus anterior table.
- The frontal sinus anterior table was contoured to be similar to the contralateral side.

Discussion
- Anterior table benign frontal sinus osteomas can cause facial disfigurement and recurrent headaches.
- Surgeons typically perform either an open or endoscopic ostectomy using a high-speed drill, which may chatter and entrap hair, skin or vital structures.
- Ultrasonic bone emulsification and aspiration using SUBA offers decreased blood loss, preservation of adjacent soft tissue structures and precise bone removal.

Conclusions
- We report the first case of anterior table benign frontal sinus osteoma removal with SUBA.
- SUBA presents a significant advance over conventional high-speed drill surgery.