We present the case of a 48 year old Asian female who presented to our clinic 8 years after silicone implant forehead augmentation with complaints of brow swelling, tenderness and periorbital edema. Imaging revealed non rim enhancing fluid collection and underlying bony ridges. Subsequent medical management included antibiotics which lead to resolution of the majority of symptoms. Patient was then taken for elective removal of the implant with subsequent human acellular tissue matrix reconstruction. We describe our decision making process as well as our intraoperative maneuvers.

• A 48 year old otherwise healthy Asian female with a history of implant forehead augmentation 8 years ago presented with 24 hours of forehead pain and swelling as well as periorbital edema.
• She denied recent trauma, fever, nausea, vomiting. She reported intermittent chills.
• She endorsed intermittent swelling of the forehead since implant placement.
• Physical exam revealed bilateral periorbital edema, right greater than left. Her forehead was edematous and tender to palpation.
• She was was started on antibiotics and a CT scan was obtained (Figure 1).

![Figure 1. CT showing bony ridges and crescentic fluid collection over implant.](image1)

The patient was reexamined 48 hours later and noted to have some improvement with persistent edema and tenderness. Antibiotics were continued for 10 days with some improvement. She was offered explantation of the implant for definitive treatment.

![Figure 2. Preoperative (A) and 3 months postoperative (B) profile views of forehead.](image2)

We used a partial trichophytic incision (Figure 3) and carried the dissection through the pericranium. We encountered a thick fibrous capsule around the capsule. This contained maroon viscous fluid. The fluid was evacuated and the implant was exposed (Figure 4A).

![Figure 4: Implant exposed (A) and on back table (B).](image4)

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• She was offered explantation of the implant for definitive treatment.

The underlying frontal bone had two corresponding areas of ridging secondary to bony resorption. The superior row was easily accessed and felt to be potentially cosmetically disfiguring (Figure 5). We therefore removed these ridges with a 4mm osteotome.

![Figure 5. Underlying bony ridging.](image5)

To reconstruct the expanded cavity, we used a 6 x 12 x 1.04-2.28mm sheet of human acellular tissue matrix (Alloderm, Life Cell, NJ) cut the same shape and size as the explanted implant (Figure 6).

![Figure 6: Sculpted tissue matrix graft.](image6)

• Aerobic and anaerobic cultures of the hematoma contents exhibited no growth.
• Antibiotics were administered postoperatively.
• The patient presented 24 hours later with 24 hours of forehead pain and swelling as well as periorbital edema.
• A 48 year old Asian female with a history of implant forehead augmentation 8 years ago presented with 24 hours of forehead pain and swelling as well as periorbital edema.

We encountered a thick fibrous capsule around the implant. This contained maroon viscous fluid. The implant was then removed en bloc from the pericranium. We used a partial trichophytic incision and added the tissue matrix graft to the expanded cavity with a 4mm osteotome.

• To reconstruct the expanded cavity, we used a 6 x 12 x 1.04-2.28mm sheet of human acellular tissue matrix (Alloderm, Life Cell, NJ) cut the same shape and size as the explanted implant (Figure 6).

![Figure 3: Partial trichophytic incision.](image3)

• Antibiotics were administered postoperatively.
• The patient was pleased with her forehead contour and she denied any pain or discomfort.

We believe that this case is the first reported case of delayed hematoma complicating an alloplastic forehead implant. Additionally, the secondary bony resorption and tissue expansion presented a reconstructive challenge. These complications must be considered when evaluating a patient for alloplastic facial augmentation.

In a patient with a history of alloplastic facial augmentation who presents with pain and swelling, infection, soft tissue reaction and hematoma must be considered in addition to other etiologies for facial swelling such as complicated sinusitis.

REFERENCES