

Complications of Breast Augmentation using Polyacrylamide Gel

Polyacrylamide gel was first used in Ukraine in late 1980s for breast augmentation without surgery. It was approved for soft tissue augmentation in China in 1997 but withdrawn by the Chinese State Food and Drug Administration in 2006.

Although it was easy to administer, its complications were extremely difficult to manage.

It was potentially toxic and its stability within the human body was uncertain. This posed a lot of psychological stress on women who underwent this procedure though free of its complications

Its complications included pain, nodularity, migration, infection and asymmetry. The management of these complications were difficult as it was seldom localized to a single mass but widely dispersed into different tissue planes including subcutaneous tissue, glandular tissue, muscles and inside the pleural cavity. It was also intimately related to the normal tissue which need to be sacrificed during removal of the polyacrylamide.

Surgical removal of the polyacrylamide entailed removing the gel together with its capsule. In severely infected patients with significant destruction of the glandular and skin tissue, mastectomy may be necessary.

Patients may be satisfied with removal of the polyacrylamide alone to alleviate the symptoms. For those who need reconstruction, this could be done simultaneous or 3-6 months after the removal of the polyacrylamide.

The difficulties in evaluation, management and surgery for these complications would be discussed.