SEPTOPLASTY BY USING SEPTAL CLIP TO AVOID NASAL OBSTRUCTION DUE TO NASAL TAMPONADE AFTER SEPTAL SURGERY

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Abstract

Septal deviation are pretty common occurence and eventhough septal deviations are common they are usually not severe enough to cause symptoms.[1] The deviated nose is a common deformity encountered in rhinoplasty, and yet it remains one of the most difficult and challenging pathologies to treat, even for experienced surgeons.[2] Although numerous surgical approaches have been documented in the literature, there is still no technique that can guarantee a succesfull outcome, and no technique has a clearly lower revision rate. To enable more accurate diagnosis and treatment of deviated nose, some studies have created criteria by which to categorize deviations.[3,4] Nasal Packs are indispensable in ENT practice. Functional endoscopic endonasal sinus surgery allows the use of modern nasal packs, since pressure is no longer required. So called hemostatic/ resorbable materials are a first step in this direction. However, they may lead to adhesions and foreign body reactions in mucosal membranes.[5] Nasal packing is routinely used after septoplasty because it is believed to decrease risk of postoperative bleeding, hematomas, and adhesions. Multiple studies have shown, however, that there are numerous complications associated with nasal packing. Nasal packing after septoplasty does not show any postoperative benefits. Fibrin products show a possibility of decreasing postoperative bleeding. Routine use of nasal packing after septoplasty is not warranted. [6]

Keywords: Septal Deviation, Septoplasty, Nasal Packing, Septal Clip

INTRODUCTION

Septum straight incidence and in the middle position of the nose was rare, generally there is mild deviation in the anatomy of the nose, or maybe spine deviation in the septum. Approximately 75%-85% of populations have a variations in the nose and generaaly were septum deviation. The deviation septum which is no symptoms usually normal. Instead the severe complaints due to nose obstruction and disrupt of nasal function and cause some complication or aesthetics of the face caused by septum nasal deviation[6-8]

Deviation of the septum can lead some coplication in the nose or paranasal siunuses. The symptoms are nose obstruction, epistaxis, headache, or symptoms relation to the srhinosinusitis. Septum deviation diagnosis based on clinically symptoms, physical examination both anterior rhinoscopy and nasoendoscopy. [8,9]

The septum deviation treatments very depend on the complaints and much more the complications caused it. Septoplasty were done for the nose blockage, to widening access to the middle turbinate in endoscopy sinus surgery. [10-13] headache as the point contact to the septum deviation. [13] Epistaxsis and an access to speciality surgery and for the cosmetics. [9]

Septoplasty was a procedure to septum correction.[14] Nasal Packs are indispendable for the ENT practitioner. There is an increasing number of products on the market utilizing different materials. Current lliterature from 2000 to 2008 has been surveyed to provide a review of indications, effectiveness and risks of nasal packs and stent. Nasal packs are designed to:[15]

- Provide hemostasis after epistaxis or surgery
- Provide support for the cartilaginous and bony nasal structure, nasal conchae or soft tissue (i.e. sliding flaps)
- Prevent adhesions or stenosis, especially following sinus surgery. In this case packs should remain placed for a longer period of time, specially formed struts, and certain materials are especially advantageous.

Risks, Side Effects and Complication

Risks must be carefully weighed against benefit when using nasal tamponade (NT).

Patient Comfort/ Discomfort

Patient comfort plays an increasinglyimportant role and must be considered when choosing a nasal tamponade, even if functional effectivity remains the primary concern. A prospective study by the author showed that detailed explanation about the necessity of NT"s increase patient's acceptance. Even if the NT was required for longer period of time, the

discomfort experrienced by the patients did not increase. Instead, patient showed increase tolerance. Muluk et al make a conclusion using a fear and depression scale. Patients showed no significant impairmentif they were sufficient informed about the surgical procedure and post operative NT's beforehand. Discomfort is mainly caused by: pain, reduction of the airflow, and impaired sense of smell and increase nasal secretion. [15]

Pain is mainly caused by placement and removal of NT's, but may also develop while placed. Removal of the NT's is often remebered as the most uncomfortable part of the surgical procedure. Studies shown that NT's with smooth and fine pore surface, that is those withthe least adhesion to the tissue, caused the leaast discomfort during removal. BWG's rest of NT's. There is no clear order for GFT, rapid rhino or coated PVA. Most stdies investigating comfort during removal of NT's focus on merocel with large pores and describe moistening the packs before removal, application of local anesthetics or use of pain medications.[15]

Tissue Damage- Pressure Necrosis

Endonasal tissue damage occurs through pressure by nasal packs or during placement and removal. While superficial tissue damage generally heals well, it may also lead to the development of granulations that bleed easily. There are most often found in anterior segment of nasal septum. Excessive pressure over time can lead to necrosis of the mucous tissue, septal cartilage, and bone in septum or nasal conchae.

Case Report

Case 1 a man, 32 years was came to the MF hospital on 20 September 2014 with main complaint is nose blockage on the left side. This complaint has been for 1 year, nose bleeding, rhinnorea and smell odor was not found. Headache occasionally found especially if there is nasal blockage History of allergic rhinitis was not found. History of trauma was not found. On physical examination using endocopic was found septal deviation on half left nasal cavity. We decided to continue with CT Scanning of paranasal sinuses coronal and it was found Spine type of nasal deviation. We planned to operate the patient with septoplasty technique under general anesthetics. The routine blood was normal, ad random glucose was normal, clotting time and bleeding time was normal, Blood pressure was normal. So we decided to did septoplasty to the patients, and during operation the mucose was slightly torn, and the septum was take out. After that we observe for the bleeding and after make sure there was no bleeding for the last we using nasal clip as a substitute nasal tamponade. After 24 hours the septal clip was opened and observe no bleeding and the patient undiscomfort caused by he still breathing even after operation. We took the patient to outpatient the day after the nasal clip was opened. The patient was controlled to the hospital after 3 days and the result was good.

Case 2 a man, 38 years old was came to the hospital on 06 November 2014 with main complaint is nose blockage on the right side. This complaint has been for 1,5 years and complaints become worse for 3 months now, nose bleeding sometimes found, rhinnorea and smell odor was found. History of trauma was not found. Tympanic mebrane on both side was normal, oropharynx was normal. On physical examination using endocopic was found septal deviation on anterior right nasal cavity. We decided to continue with CT Scanning of paranasal sinuses coronal and it was found anterior C Shaped of nasal deviation. We planned to operate the patient with septoplasty technique under general anesthetics. The routine blood was normal, ad random glucose was normal, clotting time and bleeding time was normal, Blood pressure was normal. So we decided to did septoplasty to the patients, and during operation the mucose was good, and the septum was take out. After that we observe for the bleeding and after make sure there was no bleeding for the last we using nasal clip as a substitute nasal tamponade. After 24 hours the septal clip was opened and observe no bleeding and the patient undiscomfort caused by he still breathing even after operation. We took the patient to outpatient the day after the nasal clip was opened. The patient was controlled to the hospital after 7 days and the result was good.

Case 3 a woman, 40 years was came to the MF hospital on 20 December 2014 with main complaint is nose bleeding on the left side. This complaint has been for 3 months. Headache

was found. History of allergic rhinitis was not found. History of trauma was not found. On physical examination using endocopic was found septal deviation on one third posterior of left nasal cavity and coincide to middle turbinate, the source of bleeding came from the septum and the mucosa was hyperemis. We decided to continue with CT Scanning of paranasal sinuses coronal and it was found one third posterior Spine type of nasal deviation. We planned to operate the patient with septoplasty technique under general anesthetics. The routine blood was normal, ad random glucose was high, clotting time and bleeding time was normal, Blood pressure was high. We consult the patient to internist and canclled for operation for 3 days. After 3 days we check for the blood glucose and blood pressure was normal, So we decided to take septoplasty to the patients, during operation the mucose was torn much more, and the septum was take out. After that we observe for the bleeding and make sure there was no bleeding, we using nasal clip as a substitute nasal tamponade. After 24 hours the septal clip was opened and observe no bleeding and the patient undiscomfort caused by he still breathing even after operation. We took the patient to outpatient the day after the nasal clip was opened. The patient was controlled to the hospital after 5 days and the result was good.

Discussion

We report three cases os septoplasty which are using septal clip to substitute nasal tamponade. Clinically the ndication of septoplasty done to the nasal blockage bilateral or unilateral, persisten or recurrent of epistaxis, headache due to septal deviation, wide access to the osteomeatal complex in sinus surgery. [6-11] in this case main complait of the patients were variety, in the first case the main complain was nasal blockage but in second case the main complain was nose bleeding. This complaint caused by the septum on the deviation side narrowing the side of deviation and due to nasal blockage and occasionally nose bleeding.

Chung et al (2007) report indication of septoplasty in 106 cases with mostly main complaint were nose blockage (64.6%), to widening the access in sinus surgery are 34.5%. Nawaiseh et al report 60 cases of septoplaty due to nose blockage indication (91.6%) which are 23 cases only septoplaty and 37 cases both septoplaty and FESS. Su et al report 82 cases of septoplaty and FESS. [16]

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even if functional effectivity remains the primary concern. Discomfort is mainly caused by: pain, reduction of the airflow, and impaired sense of smell and increase nasal secretion. [15]

We using the septal clip to avoid patients discofomrt caused by nasal tampnade after surgery. Using septal clip is for 24 hours and should be release after 24 hours. the septal clip purpose was made internal fixation after septoplasty so the septum will be in the middle position and hold for a while, the second is to stop if there is some bleeding after surgery so the clip will press the source of the surgery and the last to avoid nasal tamponade and will reduce the patients suffering from nasal blockage.

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