Interventional Ethanolamine Oleate Sclerotherapy for Treatment of Plunging Ranulas: Case Report

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Materials and Methods

Pre-procedure assessment:
- Complete history, physical, and noninvasive imaging examinations to demonstrate presence of plunging ranula.

Procedure:
1. Local anesthesia with conscious sedation or general anesthesia.
2. Ultrasound and fluoroscopic guided placement of a 19G Y95 or micropuncture needle into the plunging ranula.
3. Aspiration of ranula contents.
4. Injection of ethanolamine sclerosant and contrast into the ranula under ultrasound and fluoroscopic guidance.
5. Re-aspiration of the solution may be done after the procedure.

Case #1

33 year old female with left facial swelling.

The results criteria depend of the post-treatment changes.

"Marked" response = decrease of more than one half when compared with pretreatment size.
"Nearly complete" response = decrease of less than one half when compared with pretreatment size.

The ranula was accessed with a 19-G Y95 needle and 12cc of thick, mucinous fluid was aspirated under ultrasound guidance.

Results

The results of the procedures are demonstrated in the figures below.

Case #2

47 year old male with a mass/swelling in the left submandibular region and floor of the mouth.

The ranula was accessed with a 19-G Y95 needle and 12cc of thick, mucinous fluid was aspirated under ultrasound guidance.

Conclusions:

- In our cases reports we had favorable results for the use of Ethanolamine Oleate Sclerotherapy as an alternative to surgery.
- We here illustrate two cases that showed initial complete response without complications. The efficacy in terms of recurrence was similar to marsupialization.
- More than one sclerotherapy session may be necessary in these patients. Complexity of cyst and persistent recurrence may warrant surgical consultation.
- We encourage a larger prospective study to fully evaluate the efficacy of ethanolamine oleate in the treatment of plunging ranulas.