Homoeopathic management of oral mucocele: A case report

Dr. Arunava Nath and Dr. Deb Kumar Palit

Abstract
Mucoceles are the most common benign salivary gland lesion in the oral cavity. The incidence of mucoceles is due to the prevalence of minor salivary gland tissue in the oral cavity and the frequent occurrence of trauma to these tissues, which results in their formation. These lesions are painless, freely movable, smooth, and fluctuant. Their appearance is so characteristic that the clinical diagnosis is frequently confirmed by histopathologic diagnosis following removal. They occur on the buccal mucosa, tongue, palate and specifically the lower lip. They occur most commonly in children and young adults, probably due to the relatively high incidence of oral trauma in younger patients. Conventional treatment is surgical excision. A case of an 8 year old girl is presented here who presented with lingual mucocele and was treated with individualized homoeopathic medicine Calcarea carbonica. The swelling disappeared within one month of treatment with general improvement of the patient.

Keywords: Oral mucoceles, international classification of diseases, individualized homoeopathy, calcarea carbonica

Introduction
Mucoceles are defined as mucus-filled cavities, which can appear in the oral cavity, appendix, gallbladder, paranasal sinuses, and lacrimal sac \cite{1,2}. The term mucocele is derived from a Latin word, mucus and cocele means cavity \cite{3}. Oral mucoceles (OMs) are benign soft tissue masses and are clinically characterized by single or multiple, painless, soft, smooth, spherical, translucent, fluctuant nodule, which is usually asymptomatic.\cite{4} It is the most common minor (accessory) salivary gland lesion affecting the general population. Minor salivary glands are found in most parts of the oral cavity except the gingiva.\cite{5} When this lesion is located on the floor of the mouth are named as ranulas because the inflammation resembles the cheek of a frog \cite{6}. The common most site for occurrence of mucocele is the lower lip, there is no sex predilection, and children & young adults are more susceptible.

There are two mechanisms suggested for development of this lesion: mucous extravasation (Figure 1) and mucous retention (Figure 2). Most mucoceles are of the extravasation type, caused by trauma to the salivary glands, biting the lip tongue or cheek. As a result, they have a tendency to occur in younger patients \cite{7}. They can persist unchanged for months unless treated. The diameter may range from a few millimeters to a few centimeters. If left without intervention, an episodic decrease and increase in size may be observed, based on rupture and subsequent mucin production \cite{8}. Patients present with a small lump which is painless swelling and grows slowly. The swelling may interfere with eating and may get bitten in the process. Fluctuation test and transillumination test usually cannot be performed as the cyst is not big enough. The cyst can be moved and the overlying mucous membrane is not fixed to the cyst. The local lymph nodes are not enlarged. Conventional treatment is complete excision of the cyst under local anaesthesia. If the cyst is a big one, general anaesthesia may be required. Cryosurgery may be tried if possible \cite{9}. International Classification of Diseases-10-CM Diagnosis Code for mucocele of salivary gland is K11.6 \cite{10}.
Previously, solely by an external lesion, still on for swelling of 7 years, treated...

Schussler has also given indication for ranula under sanguine constit.

Boericke has mentioned indication of ranula in vascular, connection with salivary ducts, ranula...Clarke has given indication for...

Mercurius into requisition the dynamic physician and his helpful homoeopathy come to accomplish the work of healing.....the services of dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition.

Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc. But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition.

Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

Clarke has given indication for Natrum muriaticum, Dr Robin Murphy has given indication for ranula under the tongue under Calcarea carbonica. Dr Harimohon Choudhury has given indication for swelling and induration of glands, pathological changes in the teeth or dental arches under syphilitic or tubercular diathesis. Dr S.K. Banerjea has stated sycotic miasm produces incoordination everywhere resulting in over production, growth, and infiltration. In repertories we find indicated medicines under rubrics:


Cysts: Ap; Ars; BAR-C; CALC; GRAP; Lyc; Nit-ac; PHO; Sabi; SIL; Sui; Thu.

Mouth: TUMORS, mouth - lips, cystic on Con. kreos. Sep.

Mouth: TUMORS, mouth - lips, cystic on - cystic on, lower phos.

Clinical: Tumors, general - mouth, tumors - lips, cystic on Con. kreos. phos. sep. sil.

Clinical: RANULA


Case report

Patient information: An 8 year old girl visited the outpatient department of Pratap Chandra Memorial Homoeopathic Hospital & College, Kolkata on July 02, 2019.

Presenting complaint: Patient presented with swelling under the tongue for last 2 weeks which was gradually increasing on size. The swelling was painful, aggravated while eating particularly warm food or drink.

History of present complaint: Patient presented with swelling under the tongue for last 2 weeks which was gradually increasing on size. The swelling was painful, aggravated while eating particularly warm food or drink. Subject could not mention about any history of trauma. No treatment taken. She was also gaining weight for last 6 months.

Past history: In past she suffered from dengue fever at the age of 6 years. She was treated with non homoeopathic medicines with recovery. She also suffered from viral hepatitis (? Hep A) at the age of 7 years, treated homoeopathically with recovery.

Family history: Father died of cerebro-vascular accident, mother was suffering from hypothyroidism.

Physical generals: Patient was thirsty, appetite was good. Desire for eggs, Sour, salt aversion to milk. Patient was constipated, hard stool at 2-3 days interval which passed with much difficulty. Sweating was profuse and offensive particularly in head. Sleep was good, with dreams which were not remembered. Thermally she was very chilly.

Homoeopathic literature

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.

In §186 of Organon of Medicine, Dr. Samuel Hahnemann has said those so-called maladies which have been produced a short time previously, solely by an external lesion, still appear at first sight to deserve the name of local diseases. The treatment of such diseases is relegated to surgery; but this is right only in so far as the affected parts require mechanical aid, whereby the external obstacles to the cure, which can only be expected to take place by the agency of the vital force, may be removed by mechanical means.....etc.

But when in such injuries the whole living organism requires, as it always does, active dynamic aid to put it in a position to accomplish the work of healing.....the services of the dynamic physician and his helpful homoeopathy come into requisition. Dr G.H.G. Jahr has mentioned the use of Mercurius in the treatment of ranula. In one case where Mercurius seemed unable to effect a cure, he had to complete it with Thuja. In another case, where Thuja had effected the beginning of an improvement, he had to wind up the treatment with Nitric acid and Mercurius.
Mental picture: Patient had slight difficulty in comprehending, weakness of memory and desired for company.

General survey: Patient was well oriented, alert and cooperative. Clinically no anaemia, cyanosis, oedema, jaundice or clubbing detected. Her weight was about 34kg.

On examination: Soft cystic swelling underneath the tongue which was painful on pressure.

Diagnosis: Oral mucocele (Figure 4)

Analysis and evaluation
1. Difficulty in comprehending,
2. Weakness of memory
3. Desire for company.
4. Appetite and thirst were good.
5. Cravings for eggs, sour and salt.
6. Aversion to milk.
7. Patient was constipated, hard stool at 2-3 days interval which passed with much difficulty.
8. Sweating was profuse and offensive particularly in head.
9. Sleep was good, with dreams which were not remembered.
10. Thermally she was very chilly.
11. Weight gaining since last 6 months.
12. Soft cystic swelling underneath the tongue which was painful on pressure.

Case analysis
The case presented with characteristic mental and physical symptoms. Totality of symptoms indicated individualized homoeopathic medicine Calcarea carbonica which was further substantiated by repertorization with Kent’s repertory and consultation with homoeopathic materia medica. Repertorization software used was RADAR®, version 10.0.028 (ck), Archibel 2007, Belgium. The medicines were procured from good manufacturing practice-certified firms of India. Medium potencies were selected to avoid any unnecessary aggravations. [22]

Remedial analysis
Calcarea carbonica (24/11), Phosphorus (26/10), Carbo vegetabilis (20/9), Argentum nitricum (19/9), Conium maculatum (18/9). Calcarea carbonica covered all the symptoms. Allen’s Keynotes was consulted: Tendency to obesity in youth and take cold readily in consequence were considered while selecting the simillimum [23].

Remedy selection and administration:
Calcarea carbonica 30c was prescribed in 30ml aqua distillata. Two doses to be taken once daily for two days in early morning in empty stomach. Liquid placebo for 14 days was also given to be taken thereafter in similar manner.

Advices: Serum T3, T4, TSH. Also advised to maintain proper oral hygiene and to have balanced diet.

Table 1: Follow up

<table>
<thead>
<tr>
<th>Date</th>
<th>Change in symptomatology</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>16/07/2019</td>
<td>Size of mucoccele reduced considerably. Stool becomes regular. Reports not done.</td>
<td>Liquid placebo for 14 days</td>
</tr>
<tr>
<td>23/07/2019</td>
<td>Sudden pain occurred in the swelling since last night. Thyroid profile within normal limit. Weighed about 34kg</td>
<td>Calcarea Carbonica 200c one dose stat, Liquid placebo for 14 days. Advised weight reduction by proper diet and aerobic exercise.</td>
</tr>
<tr>
<td>07/08/2019</td>
<td>No swelling seen. No pain felt Stools passed every day.</td>
<td>Liquid placebo for 14 days Advised to maintain proper oral hygiene.</td>
</tr>
<tr>
<td>21/08/2019</td>
<td>No swelling seen. Overall better. Weighed about 33kg.</td>
<td>Liquid placebo for 14 days</td>
</tr>
</tbody>
</table>
Discussion
The case was managed with individualized homoeopathic medicine Calcarea carbonica in medium potencies as per necessity of the case and necessary advices regarding diet and regimen was given from time to time. In conventional treatment surgical intervention is the method of choice. With homoeopathic management the OM was reduced in size as well as the bowel movement was also regularised. The treatment was not only holistic but also cost effective. We have presented a single case on OM but to ascertain the role of individualized homoeopathic treatment in such condition, controlled trials with adequate sample size is required. Further trials with co morbid conditions are warranted to substantiate the effectiveness of individualized homoeopathy following the tenets of Organon of Medicine. The CARE guidelines (Consensus-based Clinical Case Reporting Guideline Development) were followed while drafting the paper [24].

A 25 year old male suffering from a pea sized knot in his lower lip for last two months. He was treated with homoeopathic medicine Natrum muriaticum in 30c and 200c potencies and the swelling resolved within 15 days. [25]

Dr Shah has stressed on ruptured or obstructed salivary gland duct resulting in mucocele formation from infection, injury or tumours which could obliterate or damage salivary glands. He further suggested few homoeopathic medicines which are used in the treatment of OMs like Silicea, Thuja, Varoliumum, Calcarea florica, Mercurious solubilis, Syphillium, Antimonium tartaricum, Antimonium crudum, Apis mellifica and Ranunculus bulbosus [26].

Conclusion
A case with OM was successfully managed by administration of individualized homoeopathic medicine. However controlled trials with robust methodologicalrigors are necessitated to substantiate effectiveness of individualized homoeopathy in such diseased conditions.

Author contribution
AN: literature search, manuscript preparation, manuscript editing, manuscript review.

DKP: clinical studies, data acquisition, data analysis, manuscript preparation, manuscript editing, manuscript review.

Acknowledgement
The authors acknowledge the Principal, the departmental heads and the pharmacy section of the Pratap Chandra Memorial Homoeopathic Hospital & College. The patient’s consent was taken, without which the case study could not have been done.

References
10. ICD10data.com/ICD10CM/Codes/K00-K95/K00-


