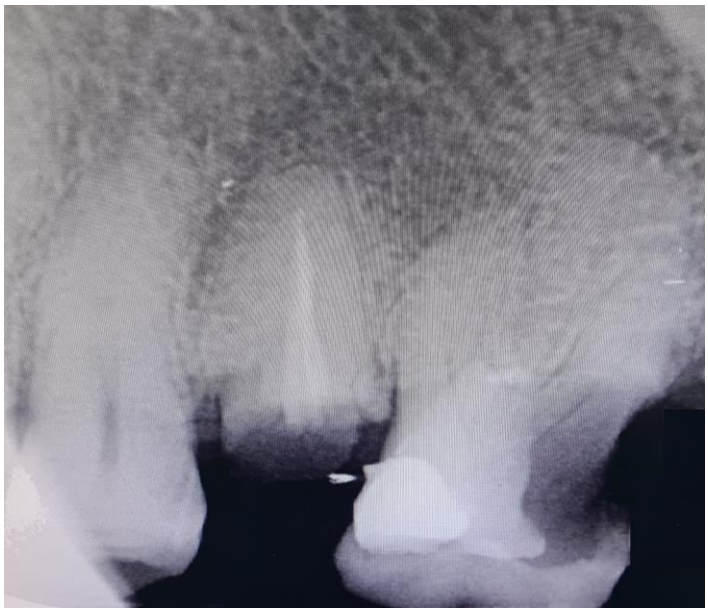
Diabetic Case and its management-



This patient presented to us with pain in his Upper First Molar.

He had a history of repeated filling dislodgement from this tooth and he only wanted extraction as the treatment option (All treatment options were clearly presented to him).

Vitality testing showed no response.

Percussion testing showed painful response.

Tooth had a swelling associated with it, the swelling was hard and not fluctuant and located in the buccal vestibule. No extraoral features were noticed and patient was not feverish or had any systemic signs of infection.

The patient had no problems with breathing, swallowing, breathing or opening his mouth.

Medical History- Diabetic- taking medications for it.

Hypertension- taking medications for it.

What should be done in such a case=>

-Before proceeding ahead with the extraction, we decided to measure his Random Blood Glucose level (RBS) which came out to be 265 mg/dl and His blood pressure reading was 132/95 mmHg

(It is advisable according to Therapeutic Guidelines to measure these readings before providing invasive treatment to patients with such medical history) + (TG recommends having blood glucometer and Blood pressure measurement apparatus at the clinic).

-Now we could clearly see the diabetic status is not controlled.

What to do next-

1) We cannot pull the tooth out since his diabetic status is clearly not controlled.

We can provide him supportive management in the form of antibiotics and painkillers and strongly advise him to see his doctor to get his diabetic status in control and then we can go ahead with pulling the tooth out. Draining the swelling is also not advocated in this case + remember not all swelling can be drained specially those without pus collection and which are hard and not fluctuant.

2) We can tell him the implications of his uncontrolled diabetic status on the proposed dental treatment and why we can't pull the tooth out today.

3)We can tell him that the antibiotics and painkillers will most likely resolve his pain and swelling but that does NOT mean he should not seek active dental treatment. He has to have the treatment done in order to avoid further problems the tooth might cause.

4)Advise them what to do in case the medications are not helping which is to contact your clinic or visit the nearest hospital.

This management plan works well for patients who have a swelling which is not extensive AND/OR which is not causing the patients any problems with breathing, opening the mouth, swallowing or eating.

Please remember referring such cases to a Specialist is not rewarding since you are comfortable in pulling the tooth out yourself + the specialist CANNOT do anything with respect to the patient's diabetic status.

If you are NOT comfortable in pulling the tooth out, like complicated extractions then only a referral to a specialist is justified only if the patient diabetic status is controlled. The Specialist will not pull the tooth out if the diabetic status is not controlled.

BUT

If the patient has a swelling which is extensive AND/OR which is causing the patients any problems with breathing, opening the mouth, swallowing or eating AND/OR Systemic features such as pallor, sweating, tachycardia, axillary temperature above 38℃ AND/OR you clinically judge the swelling is extensive and can cause problems soon- The patient should be straight away referred to the hospital having an oral surgeon or any other appropriate expert and you should arrange an emergency referral for him with all records attached. This can be done by either calling the nearest hospital or by faxing them (In emergency situations requiring hospitalization, the staff shift the patient to insulin drip or injections and perform the procedure while titrating the dose of insulin and later slowly shifting back to Oral Hypoglycemic Agents in the post operated period after discharge).

Further Information-

Key questions you should ask a patient presenting to you with a history of Diabetes -

-How old were you when you were diagnosed with diabetes and what type of diabetes do you have? How long has it been since the diagnosis?

-What medications do you take? Have you taken your medications today?

-How do you monitor your blood sugar levels?

-How often do you see your doctor about your diabetes? When was your last visit to the doctor?

-What was the most recent HbA1c (A1C) result?

-Do you ever have episodes of very low (hypoglycemia) or very high blood sugar (hyperglycemia)?

-Do you ever find yourself disoriented, agitated, and anxious for no apparent reason?

-Do you have any mouth sores or discomfort?

-Does your mouth feel dry?

-Do you have any other medical conditions related to your diabetes, such as heart disease, high blood pressure, history of stroke, eye problems, limb numbness, kidney problems, delays in would healing, history of gum disease?

-> **<u>In general,</u>** morning appointments are advisable in patients with diabetes since endogenous cortisol levels are typically higher at this time; because cortisol increases blood sugar levels; the risk of hypoglycemia is less.

-> **<u>For patients</u>** using short- and/or long-acting insulin therapy, appointments should be scheduled so they do not coincide with peak insulin activity, which increases the risk of hypoglycemia.

-> **It is important** to confirm that the patient has eaten normally prior to the appointment and has taken all scheduled medications. If a procedure is planned with the expectation that the patient will alter normal eating habits ahead of time (e.g., conscious sedation), diabetes medication dose may need to be modified in consultation with the patient's physician.

-> **Patients with well-controlled** diabetes can usually be managed conventionally for most surgical procedures. If the patient's food consumption will be affected after oral or dental surgery, a plan to balance the patient's diabetes medications and food intake should be established in advance.

Read this carefully-

-> **The main issue of** blood sugar is not during the extraction procedure, but what may happen after the procedure during the healing period as in delayed wound healing, dry socket or even osteomyelitis. Co-existing conditions in a diabetic (like hypertension) may affect the outcome. The mere increased blood glucose levels are not a risk factor during the procedure. They tolerate the procedure well but in the post extraction period, some complications may be anticipated. Meticulous management of these complications can help avoid issues.

-> **In diabetic states,** the potential risks / complications are related to the poor healing capacity, neutrophil which are qualitatively poor (counts are normal usually). A case-by-case decision may be required before treatment and it's important to remember that 'guidelines' exist for 'guiding' and may need to be adapted per patient per condition.

-> **Prior to initiating any** invasive dental treatments, blood glucose levels of patients with diabetes should be less than 200 mg/dL. Consider that the physical and emotional stress that may occur during treatment can cause blood glucose levels to rise even higher and possibly place the patient at risk for a medical emergency.