Self-extraction: A cautionary tale

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June 29, 2022

Abstract

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Abstract:

Literature is rich on complications related to tooth extraction, which is a commonly performed oral surgical procedure. It is widely accepted as one of the simplest procedures when performed in a controlled environment with due precautions. Often simple procedures in terminology of doctors and medical professionals are interpreted in a similar manner or fashion amongst the laymen. This misinterpretation or misunderstanding usually results in a casual approach towards one's own health. Or in other terms, Illiteracy and sparse knowledge about the controlled environment and complications associated with it in presence of comorbidities can lead to irreversible complications and may even sometimes be fatal in nature. For an example, undiagnosed blood coagulation disorders can really be fatal. The author's intent is to bring one such case to focus wherein just mere lack of knowledge and casual approach towards one's own health having undiagnosed underlying blood coagulation disorder led to catastrophic sequence of events, leaving behind a cautionary learning tale from a loss of life.

Keywords: Tooth Extraction, Extractions, Extraction, Tooth.

Introduction:

Tooth extraction is one of the most commonly performed oral surgical procedure.[1] Whenever it is performed with due precautions in controlled environment the chances of untoward incidences are minimal. Socio economic status, literacy and oral health awareness go a long way in realizing this goal. Owing to these constraints many people in India are still averse to visiting a Hospital for seeking Dental treatment. Many individuals seldom get their routine health checkup done which makes them susceptible to undiagnosed systemic conditions. An individual unaware of the consequences is often tempted to remove a mobile tooth by himself/herself which is termed as self-extraction. Amer in 2014 was of the view that evidence of bleeding beyond the pressure pack to be labelled as post extraction bleeding.[2] Lockhart in 2003 specified certain criteria's for ascertaining post extraction bleeding: persistent bleed beyond 12 hours; return of patient to the concerned person who performed extraction: progressive hematoma or ecchymosis; or requiring transfusion of blood and hospitalization.[3] Most individuals performing self-extraction get away with post extraction bleeding and fail to develop any threatening complications. But some individuals can have catastrophic events which can even be a potential threat to life.[4]

We intend to report a case of self-extraction which reported to our Hospital and discuss the possible cause of succeeding series of events

The case

A 56 year old male reported to the outpatient Department of Oral and Maxillofacial Surgery, Sharad Pawar Dental College with a complaint of bleeding from extraction socket of left first mandibular molar. Patient self-extracted the aforementioned tooth 6 days back. Even after elapsing of 2 hours after extraction the bleeding ceased to stop. This raised an alarm in the patients mind. He went to the same Dentist where suturing of the socket was done, evident by the residual suture tags. Even after that oozing was present from extraction site. Patient did not pay much attention to the ooze and continued his daily activities in the anticipation of stoppage of bleeding over course of time. He gave no history of any bleeding or clotting disorder, hemophilia, episode of myocardial infarction or any other systemic condition. He gave history of chronic alcohol consumption. He presented with no history of long term medication known to impede blood clot formation or blood thinning therapy

Intra-oral examination revealed continuous ooze from the socket. Buccal cortical plate was found to be missing. Clots from around the surgical site were retrieved. Local hemostatic control measures yielded no encouraging results. On systemic inspection Petechiae were found on the chest and back region. At the outset patient was reluctant to get admitted in anticipation of a minor problem. On persistent persuasion and counselling he and his relatives agreed upon. Preliminary hematological investigations were performed .MCV (Mean corpuscular volume) was found to be 132 FL, MCH (Mean corpuscular hemoglobin) 40Pg, hematocrit value was found to be 35.1, MCHC (Mean corpuscular hemoglobin concentration) of 30.1 which suggested of macrocytic anemia. This could be attributed to his habit of chronic alcoholism .Prothrombin time was found to be 16 seconds. He was found to be thrombocytopenic having a platelet count of 20000/mm3.Peripheral smear was suggestive of acute myeloid leukemia. Bone marrow biopsy was planned to confirm the diagnosis At this point of time initial focus of treatment was on controlling acute bleeding. Local hemostatic measure in form of gelatin sponge packing followed by suturing was instituted. Systemic administration of Vitamin K yielded no encouraging results. Infusion of fresh frozen plasma was about to be initiated.

Following this patient went unconscious. He was immediately intubated.

Computed tomography revealed intra-parenchymal bleed in left fronto-parieto-temporal and gangliocapsular region. Epidural, subdural and subarachnoid hemorrhage too was observed. (Fig.1) Patient was immediately shifted to Department of Neurosciences for management. In the course of treatment he did not improve and eventually succumbed.

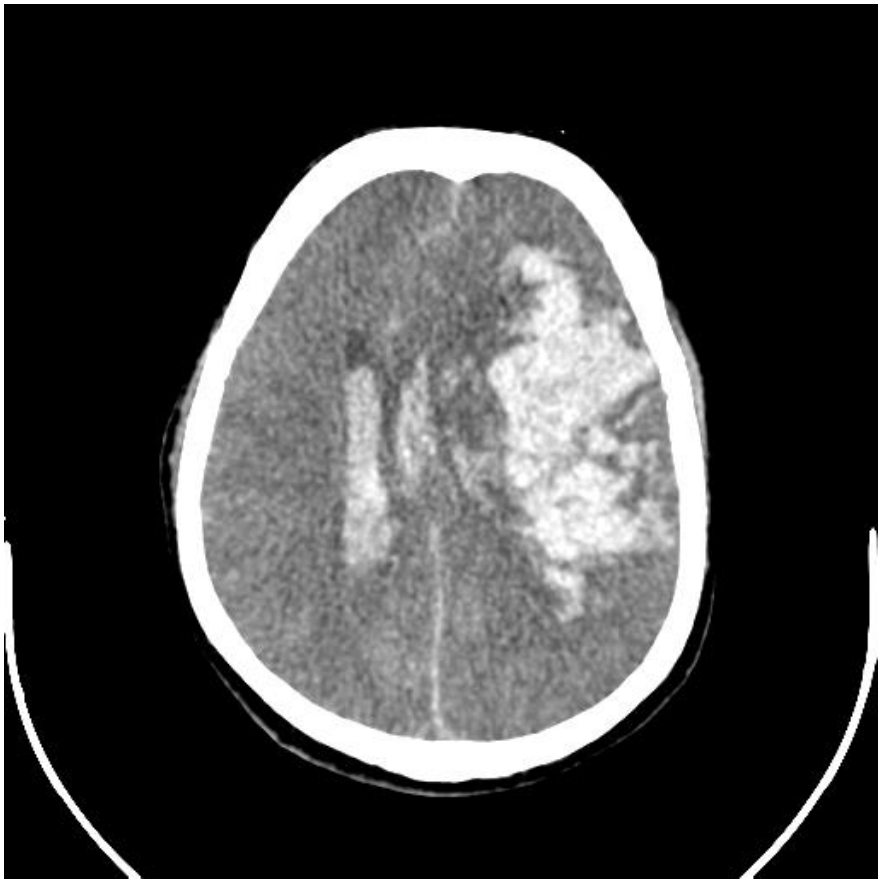

Fig. 1: Intra-parenchymal bleed in left fronto-parieto-temporal and gangliocapsular region

Discussion

Creation of a stabilized clot is of paramount importance for facilitating unhindered and uneventful healing of the surgical wound created after tooth extraction. Dormant systemic abnormalities can get easily triggered by a trivial minor procedure like tooth extraction. This can lead to ramifications, series of events which can be life threatening for the patient. Nowadays many patients are on anticoagulant therapy making them susceptible to post extraction bleeding.[5]Such patients invariably are aware of the medications they are consuming. This makes extraction under controlled environment possible. People unaware and ignorant about their health status are like a time bomb which can land them in a state of no reversal. Chronic alcoholism is such an exigency which requires ardent attention. It can cause diseases like hepatitis, fatty liver and cirrhosis. Long standing hepatocellular diseases can predispose to deficiencies of blood coagulation factors thereby posing as a risk for occurrence of hemorrhage.[6]Poor dietary intake in alcoholics can lead to anemia secondary to folic acid deficiency. Blood film shows oval and round macrocytes characterizing chronic liver disease. Such patients are bound to have thrombocytopenia and deficiencies of coagulation factors. Alcohol is detrimental for bone marrow which could have led to suspicion of acute myeloid leukemia in this case. Thrombocytopenia is commonly seen in patients with chronic liver disease with reports of up to 76% patients having cirrhosis.[7]

Chronic alcoholics are at high risk for developing intra-cerebral hemorrhage due to reduced liver produced coagulation factors and platelet abnormalities coupled with hypertension.[8]Instant episode of alcohol consumption along with the stress induced due to extracted tooth could have led to acute hypertension in this case. Reduced platelet count in conjunction with their impaired function and deficient coagulation factors

must have triggered an episode of intra-cerebral hemorrhage.

Operating personals prior to extracting a tooth are very much concerned about the common systemic conditions like diabetes mellitus and hypertension. They are extremely cautious about patients on anticoagulant therapy in wake of any hemorrhagic episode. Alcohol consumption history is mostly not given the necessary importance and is often skipped during routine dental extractions. In Indian circumstances Societal taboo in deriving this history is a major hindrance. More-over patients too are reluctant to divulge this information. Most of the operating personal are also unaware of the catastrophic sequelae that can unravel after a chronic alcoholic gets his tooth removed.

It becomes imperative that operating personal should have sound knowledge of these manifestations and patients too need to be sensitized and counselled about these possibilities to prevent any attempt of self-extracting a tooth.

Conflict of Interest: None

Funding Source: None

Acknowledgement: None

Consent: Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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