Liver clot following masochistic habit: Case report

Bibin Jacob Emmanuel1, Jacob Raja2, Bathel Yeptho1, Sabahat Qayoom1

1Department of Pediatric and Preventive Dentistry, Jaipur Dental College, Jaipur, Rajasthan, India, 2Department of Periodontics, Rajas Dental College, Tirunelveli, Tamil Nadu, India

Abstract
Masochistic practices include self-inflicted oral injury, inflicted on oneself without the notion of suicide. Hemorrhage differs from mild oozing or leakage at the point of an injury to substantial loss of blood resulting in full exsanguination. Liver clot is a rare complication associated with surgery and trauma. But this time, this complication is seen in association with masochistic practices. It has to be noted that the tissues of oral cavity are highly vascular. This case report represents a unique case or probably the first case in the occurrence of “liver clot” or “current jelly clot” in succession to the masochistic practices by the child.

Keywords: Current jelly clot, Liver clot, Masochistic habit, Self-inflicted gingival injuries

Introduction
Masochistic practices include self-inflicted oral injury, inflicted on oneself without the notion of suicide. Hemorrhage differs from mild oozing or leakage at the point of an injury to substantial loss of blood resulting in full exsanguination.

Liver clot is a rare complication associated with surgery and trauma. But this time, this complication is seen in association with masochistic practices. It has to be noted that the tissues of oral cavity are highly vascular. In normal cases, people will use their tongue to play with the surgical area, dislodging the clot and causing subsequent bleeding. By creating modest negative pressures, the tongue can potentially produce additional bleeding by sucking the clot out of the location. Salivary enzymes might sorb the clot before it becomes structured and granulation tissue begins to form. However, here patient herself induced the trauma by repeated irritation to the area and prevented the healing by delaying the bleeding.

This case report represents a unique case or probably the first case in the occurrence of “liver clot” or “current jelly clot” in succession to the masochistic practices by the child.

Case Report
A 7-year-old female patient was referred to the Department of Pediatric and preventive dentistry, Jaipur Dental College, for the inspection of a large clot which was seen extending from 11 following a pencil lead inflicted injury in the gingiva overlying permanent right central incisor. Thorough case history was taken and it was noted that the injury was caused 8 days back and the clot formed initially disappeared on its own and reappeared again. It was also noted that patient had stopped brushing thereafter. Guardian was advised to get the patients bleeding time and clotting time to rule out the possibility of any bleeding disorder. It was found that the BT CT report of the child was normal. A thorough intraoral examination at the site of injury shown graphite marks at the gingival area of 11 and adjacent tooth which proved that the liver clot was formed due to the repeated disturbance of the injury site resulting in additional bleeding. Figure 1 shows pre-operative photograph of liver clot. Tweezer was used to hold the liver clot as shown in Figure 2 and incised with 15c bp blade as shown in Figure 3 and the area was thoroughly irrigated with betadine rinse. Figure 4 shows the post-operative photograph.

Discussion
The release of blood from the arteries is known as hemorrhage. Depending on the cause, it might be classed as a primary, intermediate, or secondary hemorrhage. Blood arteries are damaged during surgery, resulting in initial bleeding. When the pressure pack is withdrawn or a vasoconstrictive drug is used, intermediate bleeding develops within 24 h of surgery. Any infections, foreign substances, internal injury, and dressing
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Material could cause bleeding after 24 h, which in turn interferes with clot formation. This can result in a “liver clot” as a result of gradual, seeping blood from the surgical site. The event known as hemostasis occurs after a hemorrhage. It is described as the physiological processes that prevent or reduce blood loss at the area of trauma while allowing blood to flow normally in other areas of circulating system. Early hemostasis (aggregation of platelet and formation of platelet plug) and later hemostasis (proteolytic coagulation leading to insoluble fibrin deposition) are the two most important aspects of hemostasis. Hemostasis is triggered by an injury within seconds and remains limited to the wounded area. After a periodontal surgical operation, blood coagulation and fibrinolysis commonly occur. These are a key component of the host’s defensive system. The blood vessels constrict after a damage to the vessel wall. At this point, platelets become activated and attach to the injured subendothelial tissue. A transient hemostatic block is formed as a result of this. Platelets activate plasma clotting factors, resulting in the formation of insoluble fibrin, creating web within, and surrounding the platelet plug, thus strengthening and solidifying the clot. Primary and secondary hemostasis occur at the same time and are distinct mechanically. The fibrinolysis pathway is involved in hemostasis, which is the process of dissolving a clot once the arterial vessel’s integrity has been restored. Platelets play a crucial role in the formation of blood clot and any sort of interference in the clotting system could lead to pathological thrombus development. Platelets are abnormally little in thrombocytopenia. “Liver clot” or “currant jelly clot” is a jelly like red clot that has abundant hemoglobin. It can also occur as a result of a venous hemorrhage that is not pulsing.

It is connected with the extraction of mandibular third teeth and demonstrates inadequate fibrin clotting. Liver clot validates that erythrocyte encircles the fibrous. Suction and currettes could be utilized to eradicate liver clots. The surgical region is cleaned with betadine and a wet gauze pressure pack is inserted. In most cases, sutures are not required. Although liver clots are uncommon, dentist should know how to prevent and manage this clot. After 24–48 h, “liver clot formation” occurs, according
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This instance, on the other hand, depicts the creation of a liver clot after 8 days. This is the first reported case of a “liver clot” forming following masochistic practices. In this case, it has been found that the child injury has itself been caused by pencil inflicted injury on the gingiva of 11 and the disintegration of the initial clot was due to child masochistic practice which also leads to delayed bleeding and formation of liver clot.

**Conclusion**

Dentist and patients are equally concerned with prolonged hemorrhage. Continuous bleeding could lead to infection and impede healing of wounds. In the event of a liver clot, patients should be advised to take blood tests before undergoing any treatments. Reports of liver clot following masochistic practices are very rare. This is believed to be the first case reported liver clot occurring in relation to masochistic habit.

**References**

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