

Role of Bone Marrow Aspiration Needle in Ear Piercing

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Abstract

Earlobe piercing is a daily Out patient procedure done by a plastic surgeon. Various methods of ear piercing have been described. In this article, we describe a novel method of ear piercing using the Bone marrow aspiration needle which can be adapted and performed easily, cost effective, reusable by autoclaving. A 60 year old female patient underwent an ear piercing using a bone marrow aspiration needle. The ear piercing using this needle will help in reducing the cost to the patient in accessing the expert care at a lower cost. The advantages we noticed while using the bone marrow aspiration needle over conventional methods were more easily adapted and replicated. The disadvantage is the considerable trauma with chance of bleeding.

Keywords: Ear piercing, Bone marrow aspiration needle.

Introduction

The art of Ear piercing is a common process for the people all over the world. Now a days it has evolved as a part of their fashion process and the ear being the most common body part pierced. Although it is a routinely performed procedure, it is not without complications such as oedema, haematoma, infection and keloid formation. Various methods of Ear piercing technique have been described using intravenous needle, wire technique, lasers have

been described (1) Ear piercing in the multiple sites of the ear rather than lobule has become a fashionable process nowadays (2) In this article we are going to discuss about the art of using the novel method of Bone-marrow Aspirationneedle (Fig. 1) in ear piercing.

Materials and Methods

An 60 year old female patient visited the plastic surgery outpatient department, with a desire to



Fig. 1: Bone marrow aspiration needle

get an ear piercing after the ear lobe repair, she bought her with a stud with large. After routine blood investigations had been done, the procedure was carried out in the department minor operation theatre. Adequate safety precautions were taken. The chosen site for piercing was marked. After ensuring adequate local anaesthesia, marked area was pierced with the bone marrow aspiration needle. Once the piercing done and Haemostasis attained, a gold stud was introduced through the tract with the help of the needle as a tract (Fig. 2). The same procedure was repeated on the opposite side.

Results

The ear lobe repair was done with assistance of bone marrow aspiration needle and was found to be useful as the procedure in a cost effective way and simple easily adaptable procedure, less painful



Fig. 2: Ear Piercing with the Bone marrow aspiration needle.

with minimal trauma. It works better with the ear piercing involving the lobule and women who uses large stud to wear.

Discussion

Various other methods of ear lobe piercing have been described as follows. Piercing guns used very commonly among jewellers did not gain

much acceptance among doctors due to the higher incidence of infection (3). The wire technique which necessitates serial dilatation of the tract until the suitably sized ear stud can be placed is a painful process. The most common technique used is the railroading method, wherein an 18-gauge needle is railroaded over a 26-gauge needle over which the tip of the earring is guided through. A newer method of ear lobe piercing was described by Lamba

and Gupta, in which an 18-gauge BD Insite-W intravenous catheter was used for piercing. The CO₂ laser has been used for ear piercing by Chang et al. in 2010.^{3,4} The procedure can be carried out with topical local anaesthesia combined with various pre cooling methods used in conventional laser therapy such as cold gel application and Cryospray application. This avoids the need for an injection before the procedure and can be useful in children. Lasers used for Ear piercing are CO₂ Lasers and Er-YAG laser recently used. Bone marrow aspiration needle is a simpler instrument that can be carried easily, sterilised reused in a cost effective way, less painful, with minimal trauma and bleeding. It is helpful for the patients wearing large studs which is common in Indian women, who wears studs mainly in lobule part of the ear. It doesn't requires serial dilation to pass the large studs. The disadvantage is it associated with minimal trauma and bleeding . It cannot be used in ear piercing in younger female who chose to wear small studs. The high rate of ear piercing has led to an increased cases of perichondritis. Damage to the relatively avascular cartilage can cause ear prone to infection. The literature suggests that a piercing gun, mainly used by jewellers to pierce the lobule, may give more cartilaginous damage. The injury during ear piercing was in all techniques, causing perichondrium stripped from the cartilage around the needle tract, with maximum damage present on the exit wound. Cartilage fractures and loose fragments can happen after ear piercing.⁵

Conclusion

In this study, we found out it is useful in ear piercing with bone marrow aspiration needle as simple, easily replicable technique of Ear piercing mainly in the lobule part of the Ear. This method is useful

for ear piercing mainly in the lobule who uses to large stud which is common in Indian subcontinent countries. Limitations of the study as this is the single case report, we need to use this procedure in the larger populations for further studies to assess the usefulness and complications of the procedure.

Conflicts of interest: None.

Declarations

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