

HAZARDS OF PRESSURE PACK

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ABSTRACT

The purpose of this study was to find out how the patients disposed off the pressure packs placed on the socket after tooth extraction. The study was conducted on 260 patients who had undergone dental extraction from November 2010 to April 2011. Pressure packs were placed on the socket to stop post operative bleeding. Every study patient was asked where he / she threw his / her pack after use and whether he / she touched it for adjustment before it was finally discarded. 42.3% of the patients threw the packs on the road, and 19.2% did this within the hospitals area, like corridors and toilets. Majority of patients admitted that they touched the pack for adjustment before it was finally discarded. The risk of spread of infection is increased by first touching the blood contaminated pack and then touching the doors, chairs, and tables in the waiting areas. Patients must be informed and educated about the proper handling of the packs to minimize the chances of cross infection.

Key words: Cross infection, Pressure packs, hazards

INTRODUCTION

Ordinary patients from low income group visit public dental health care facilities. After the extraction of a tooth under sterilized condition a pack is placed on the socket and the patient is asked to bite on it for 15 to 20 minutes and then remove it. Patient may touch the pack with his hand or may manipulate the pack for adjustment between the teeth. Sometimes he has to change the pack when it become soggy and place another pack.¹ These actions may be performed by the patients soon after the extraction within the premises of the hospital, including surgeries, reception areas, and corridors, they touch the doors, table tops of reception, chairs in waiting areas with their hands which may have been contaminated with blood and thus may leave some infectious blood stains on these surfaces before leaving the premises of the hospital. Due to these actions these areas which are considered clean become contaminated.

The aim of this study was to assess the risk of cross infection after dental extraction due to pressure pack and to propose steps to prevent these risks.

METHODOLOGY

This study was conducted at Rahmat Memorial Dental and General Teaching Hospital, Abbottabad from November 2010 to April 2011. Two hundred sixty adult patients were included in the present study. They were referred from filter clinics to surgery department for extraction. 138 were females and 122 males, age ranged from 16-65 years. These patients underwent tooth extraction under local anesthesia and pressure pack (cotton/gauze pack) were placed on the socket to stop bleeding. Post-extraction instructions were given to the patients and they were asked to re-visit the clinic after three days and the following questions were asked from every patient.

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TABLE 1: AREAS WHERE THE PACK WAS THROWN

	Road side	House dustbin	Hospital premises	Did not remember	Total
Where did the patient throw the pack?	110(42.3%)	85(32.2%)	50(19.2%)	15(5.7%)	260

TABLE 2: FREQUENCY OF MANIPULATION OF PACK BY PATIENTS

	Yes	No	Did not remember	Total
Did they manipulate the pack with bare hands	148(56.9%)	87(33.4%)	25(9.6%)	260

- 1 Where they threw the pack?
- 2 Did they manipulate the pack with their hand?

The patients were not informed about these questions immediately after extraction to minimize bias. Children with deciduous teeth extraction and mentally retarded patients were excluded from this study.

RESULTS

The results of this study are shown in table 1 and table 2. One hundred and ten (42.3%) patients threw their pack on the road side or in public transport, 85 (32.2%) patients answered that they were at home in 20 minutes after tooth extraction and threw the pack in house dustbin. 50 (19.2%) replied that they threw the pack in hospital premises namely corridors, toilets, backyard and 15(5.7%) did not remember where they threw their packs.

148(56.9%) patients reported that they touched the packs for re-adjustment before they were finally discarded. 87(33.4%) informed that they did not touch and 25(9.6%) did not remember.

DISCUSSION

It is evident from the results of the present study that despite routine aseptic measures for oral surgical procedures there were certain factors which couldn't be predicted, like touching the pack with hand, then using the same hand to open the doors, or touching the table tops, and chairs in waiting areas which make these areas contaminated .

All patients should to be told that their blood can be a source of infection, even if they have no visible disease.² The clinical waste (the wastes that may cause infection to a person which comes into contact with it)

should be handled carefully. Incineration of waste decreases the danger of transmitting disease.³

The use of hemostatic self dissolving sponges after extraction can reduce the need of pack by achieving early hemostasis. There might be slight increase in running cost of surgery, but it will reduce the chances of infections. The appointment of those patients with blood-borne diseases such as hepatitis B, C, D, E and HIV, need to be scheduled at the end of the day.^{4,5} This will reduce the risk of cross infection. All the areas of surgeries need to be cleaned and disinfected at least once a day by wiping the surfaces of table tops, doors, chairs with disinfectant sprays and washing of floor with house bleach.^{6,7,8} Vaccinations against hepatitis should be mandatory for dental and para dental staff.

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