

## POST CIRCUMCISION HAEMORRHAGE

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**ABSTRACT :** From January to December 1996, nine patients were brought with post circumcision haemorrhage. All procedures were performed elsewhere. Seven circumcisions were performed by doctors and two by barbers. The ages of the children ranged from four days to two years. In five cases bone cutter was used and in two plastibell was applied. In six patients bleeding vessels (dorsal vein and frenular artery) required ligation while in one patient due to haemorrhagic disease of new born there was diffuse oozing of blood from the circumcision site. Two patients required blood transfusion. Such complications which have a definite morbidity can be avoided by observing principles of surgery during the procedure.

**KEY WORDS :** Circumcision, Haemorrhage, Neonatal Jaundice.

### INTRODUCTION

Circumcision is the most common surgical procedure performed in the Muslim world for religious reason<sup>1</sup>. There are many techniques of performing this procedure. Usually it is performed by the traditional "Hajjam" (barber) in most part of our country. Many general practitioners also perform circumcision at their clinic, although most of them have no past experience of doing this procedure. It is considered to be a minor surgery, but it can have grave consequences<sup>2</sup>. This study was conducted at the National Institute of Child Health, Karachi to collect data about one of the complications of circumcision i.e. haemorrhage.

### PATIENTS & METHODS

All patients who presented to the emergency room of NICH with post circumcision haemorrhage during 1996 and got admitted to the B unit of NICH were included in this study. The data collected included age, time since bleeding occurred, the operator the method and the treatment received.

### RESULTS

During 1996, 9 patients in whom circumcision was done elsewhere were received in the emergency room with bleeding. The youngest patient was 4 days of age (with jaundice) and the oldest 2 years. In seven patients circumcision was performed by doctors in

their clinic while in 2 cases it was done by "Hajjams" (barbers) at home by the traditional cutting method in which wooden sticks are used to maintain the position of stretched prepuce, without cleaning smegma and separating adhesions. The redundant skin is then cut with a traditional razor blade. In 6 patients the dorsal vein and the frenular artery were severed and required ligation whereas in one patient the ventral surface of the glans was also injured.

In patients who underwent circumcision with plastibell there was tearing of vessels on the ventral surface of the glans that required sealing with tincture benzoin after removal of plastibell. Circumcision in these 2 cases was then performed by the dissection method. The patient with haemorrhagic disease of the new born presented with diffuse oozing of blood without clot formation and prolonged prothrombin time. He was given vitamin K and blood transfusion. Another patient who bled for a long time also required blood transfusion. In other patients haemoglobin level was satisfactory. All patients were admitted, observed for 24 hours and later discharged on antibiotics. There was no mortality in this series and no complication occurred in the follow up period.

### DISCUSSION

The absolute indications of circumcision are only few<sup>3</sup> but still it is the most common surgical proce-

cedure performed in our country for religious reason. Traditionally it is performed by "Hajjams" and "Jarrahs" (barbers) who are non medical people without any knowledge of the anatomy. They perform this procedure as trained by their seniors. The second group of people performing this procedure are general practitioners who never had a formal training during internship.

Circumcision may have grave consequences if not performed properly and haemorrhage is one of the complications<sup>4</sup>. Knowledge of anatomy is mandatory as seen in this study where most of the practitioners failed to ligate the dorsal vein and the ventral artery. Proper infiltration of local anaesthesia, giving adequate time for the drug to act, proper positioning of the patient and observing principles of surgery while conducting the procedure is essential for optimum results. Crushing technique, in which a bone cutter is used, is dangerous as it may cause injury of the penis in an improperly anaesthetized patient, as occurred in one patient. If this procedure is used than ample time should be given to crush the vessels. If there is any doubt then vessels should be ligated.

Plastibell method is quite in vogue and considered safe and simple, but it can cause complications<sup>5</sup>. Bleeding can result due to slippage of ligature or tear of the frenular artery if the bell is introduced forcefully. Haemorrhage can also result from the dorsal vein if the inner layer of the prepuce gets retracted as the bell is being applied. This complication occurred in two of our patients.

The timing of the procedure is very important. Newborn babies can be circumcised but it is better to wait till they are a little older so that changes in

body physiology has taken place, which include disappearance of physiological jaundice and weight gain that usually starts by three weeks of age. Circumcision done in the early period carries a danger of bleeding due to haemorrhagic disease as a result of deficiency of vitamin K dependent factors. This is seen more commonly in breast fed infants. This condition should be kept in mind as it gives very good response to vitamin K<sup>6</sup>.

## CONCLUSION

Circumcision, the oldest and most commonly performed surgical procedure is not devoid of complications. It should be performed in a proper hospital set up by trained medical personnel so as to reduce morbidity and mortality.

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