

ABSTRACT

Nursing Practices for Administration of Intramuscular Injections to Neonates

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A TOTAL number of Staff Nurses of clear labour room nursery of a referral hospital of North India were observed through self prepared 38 item check list for their practices of giving intramuscular injections in neonates of 0-5 hours' age. All the practices in terms of preparations, techniques, site of injection, after care were followed accurately by the majority of Nurses. However, some of practices like hand washing before and after the procedure, cutting the ampoule by file cutter, use of right size of syringes for filling the injection and observations of neonates for complications after the procedure were not upto the mark. Hence a need for continuing education performance evaluation of Staff Nurses was suggested.

Introduction

Neonates are a vulnerable group and need special care. While in the hospital they receive medications for preventive as well as curative purposes through various routes. An intramuscular is also one of the routes for administration of medication. Since the muscles of neonates are not fully developed, a special technique and care is required while administering intramuscular medication. And if the technique is not followed properly and carefully, it can lead to problems like abscess formation, nerve damage and can even prove fatal. Thus the Nurses need to be skillful and Nursing practices must be perfect in order to give intramuscular injections to neonates.

Although every professional attending neonates tries to give the best care, individual differences in their knowledge as well practices lead to some or the other fault or lack in their performances. Whereas by studying the practices of Nursing personnel for

administration of I/M injection, strong and weak points in their performance can be assessed and accordingly good points can be reinforced and lacks can be improved.

Material and Method

An evaluative approach was adopted to gather the data by observation method. All the 16 Staff Nurses posted in clean labour room nursery were selected as the sample. A 38-item checklist was prepared. The items were on preparation for I/M injection, site for injection, type of syringes and needles used, procedure, care after the procedure and immediate complications observed. These items were later tested for their validity and each subject was observed for its practice.

Result and Discussion

Preparation for I/M Injection: All the subjects have checked the treatment sheet for right patient, right time, right drug, right dosage and right route which is important as safety measures, while only 11 (61.25%) subjects checked the drug for name,

date of expiry and colour before administering the injection to neonates.

Injection Site: The maximum number of subjects preferred *vastus lateralis* as the site for injection. This site has also been described as the safest site since there are no major nerves or blood vessels nearby and readily accessible in supine, recumbent, sitting and standing positions (Marlow, 1983). The dorsogluteal and ventrogluteal sites though selected by 2 (12.5%) subjects are not ideal sites for I/M injection in neonates since there are chances to damage the sciatic nerve leading to footdrop (Marlow, 1983).

Syringes and Needles Used: All the subjects used disposable syringes with either 24 or 26 gauge needles which are appropriate in size as far as neonates are concerned. But the sizes of the syringes used by 3 (18.75%) subjects were not according to the dose of the drug. They used 10 c.c. syringes, may be due to non-availability of syringes, but this may lead to difficulty in maintaining the accuracy. While the rest of the subjects used either 5 c.c. or 2 c.c. syringes.

The first author is the Clinical Instructor, College of Nursing, PGI and others were B.Sc. (N) interns at the time of this study.

Procedure: Handwashing before giving the injection was practised by 12 (75%) subjects and only one subject dried the hands. Whereas majority of the subjects cleaned the site with antiseptic solutions to reduce the entry of pathogens into the tissue.

Majority of Nursing staff (81.25%) did not use the file cutter to break the ampoules rather they have used other methods which resulted in reduction in the amount of drug prescribed.

All the subjects inserted the needle quickly with one prick which lessens the pain (Sacharin, 1969) and 50% subjects inserted the needle at 90. Only 9 (56.25%) subjects ensured the penetration of blood vessel by aspirating slightly the medicine back and 11 (68.75%) subjects injected the drug slowly so that pain can be reduced.

Maximum, 13 (81.25%) subjects massaged the area to aid dispersal of drug.

Care After Procedure: 11 (68.75%) subjects made the neonates comfortable after the procedure and 12 (75%) subjects disposed off the disposable articles like syringes and needles. Only 2 (12.5%) subjects out of 16 subjects washed their hands after the procedure. All the subjects put their initials on the treatment sheet. Whereas observation of neonates after giving injection was practised by 9 (56.25%) subjects only which is very important.

Immediate Complications: Practices of 2 (12.5%) subjects resulted in redness, of 3 (18.75%) subjects resulted in slight bleeding and of 2 (12.5%) subjects resulted in irritation/pain in neonates whereas practices of rest of subjects did not show any complications.

Conclusion and Suggestions

It is concluded that some of the practices like handwashing, before and after the procedure, cutting the ampoule with file cutter, use of right size of syringes according to the dosage, and observation of neonates after the procedure were not up to the mark. Hence based on the results it is suggested that the Nursing personnel should be made aware of importance of handwashing and proper technique for giving intramuscular injection and practices need to be enhanced through demonstrations by experts. Further time to time evaluation is must to ensure better Nursing care and prevention of complications.

Promote the use of Oral Rehydration Solution

Job Stress

(Continued from p. 107)

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