

Intramuscular injection practices in children's

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Abstract

Administration of Intramuscular (IM) Injections among children's unnecessary for common problems. This descriptive study included 150 children's who received atleast 2 Intramuscular Injections at different sites for their current illness. Data were collected from mothers, 90 % of children's between the age of 1 month to 2 years received unnecessary IM injections for simple problems like fever, vomiting, loose motions. IM injections were administered at wrong sites in 95% of the children's. Health education regarding safe injection practices for mothers and health personnel is very essential.

Key Word: Children's, Intramuscular Injections, Practices.

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INTRODUCTION

We conducted this study to describe the prevalent of IM injection practices among children's. Most of the common problems among children's can be managed with oral medications. However, administration of IM injections for these minor problems is quite unnecessary and harmful. The combination of injection and over use and unsafe practices increases the risk of transmission of infection and local complications like Muscle Fibrosis and Contracture, Abscess at the injection site, Gangrene and Nerve injury.

SUBJECT AND METHODS

300 children's between the age of 1 month to 2 years brought to the Pediatric outpatient department (OPD) of Bidar Institute of Medical Sciences, Bidar from September 2014 to October 2014 were registered. Children's who received medical care for the current problems and had received at least 1 IM injection and children's between 1 month to 2 years were included in the study. Children's < 1 month and > 2 years and vaccinations were excluded from the study.

RESULTS

Out of 300 children's registered, 150 (90 males, 60 females) had received medical consultation elsewhere for the present problems. Among them 130 (86%) had received IM injections, 60 had received two IM injections, 70 had received one IM injections. 78 (60%) children's were from rural areas while 52 (46%) were from urban areas. IM injections were administered for the following problems.

Sl. No	Problems	No. of injections	No. of Children's	%
1	Vomiting, loose motions	2	39	30
2	Fever	2	26	20
3	Cold / Cough	1	13	10
4	Convulsion	2	13	10
5	ASOM	1	13	10
6	Pyoderma	1	13	10
7	LRTI	2	13	10

90 (70%) children's had received two IM injections from general practitioners while 39 (26%) were administered by ANM or staff nurse. 60% of the private health care providers were unqualified. IM injections were administered at the wrong site (gluteal region) in 135 (90%) children's. only 15 (10%) of them had received it at the correct site (Anterolateral thigh). plastic syringes were used in all the children's with disposable needle's. the prescriptions available for 110 children's were analysed. The remaining prescriptions did not show any details about the IM injection administered. Among the available prescriptions 120 children's received steroids 1 month to 1 year (30), 1 year to 2 years (90), IM Paracetamol injection in 80, antibiotics (cefotaxime, ceftriaxone, gentamicin, amikacin) 100 children's, antiemetic's in 50 children's mainly in the age of 1 year to 2 years. Most mothers felt that injections provide quick relief and hence preferred

them over oral medications.

DISCUSSION

Intramuscular injections are common yet complex technique used to deliver medication deep in to the large muscle's of the body¹. However it is not a benign procedure and unsafe injection practices are estimated to have significant impact on patients morbidity and mortality. Unsafe injection practice results in millions of dollars indirect medical costs on an annual basis². According to WHO, IM injections is an administration of medications parenterally through a skin puncture by a syringe and a needle deep in to the large muscle of the body for prophylactic or curative purposes³. Unsafe injection practice may result in number of infections, particularly hepatitis B and C and HIV (4-5). Almost every second patient in an outpatient clinic in our country get prescription for an injection irrespective of the illness. Also, nearly Two - Third of these injection are unsafe (62.9%)⁶. In our study 90% of the children's received IM injections for simple illness like vomiting, loose motions, Cold, Cough, where it is not necessary. The Anterolateral thigh is the preferred site of IM injection for infants less than 12 months⁷. In this study children's between the age of 1 month to 2 years received IM injection at wrong site (Gluteal Region) in 90% of the children's. The major contributors for IM injection were unqualified personnel. According to Greenhalgh 96% of all injections given by private doctors were of antibiotics, vitamins and analgesics⁸. In our study we have seen children's been administered with IM steroids, Antibiotics, Antiemetic. In majority of the situations, prescriber decides / Pushes, convinces the patient to get an injection⁶. Eighty percent children's studied had received IM injections from private health care providers. Hence, Intensive health education regarding safe injection practices for the public as well as the health care providers especially for those in the private sector is essential. The parents mainly mothers should be educated regarding the complication, injection site and the necessity for an IM injection or oral medications. The inadequate information regarding IM injection among mothers is also quite evident. The study was conducted in

a tertiary care hospital and so the data may not truly reflect that of the population. In present study 80% of children's between 1 month to 2 years received two IM injections, one IM injection was more in 1 month to 1 year. Giving two IM injections was Rampant for common problems and at wrong sites (Gluteal Region). The morbidity related to unsafe IM injections especially traumatic is a concern in the context of AFP surveillance. In view of frequent and often irrational prescriptions for injections, wide variation in the training and background of injection givers in the country and field realities of inadequate sterilization couple reuse and improper disposal of injection waste, the need to explore appropriate ways to make injections safe in this Country assumes urgency⁶. We conclude that most of the common ailments among children's can be managed with oral medications. However, administration of intramuscular injection for these minor problems is quite Rampant and painful and may lead to complications and should be avoided. Intensive health education regarding safe injection practices for the public and health care providers is essential.

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