

Abstract:

Context: Obtaining intravenous (IV) access is one of the very frequent invasive procedures performed in hospital care settings. This has several complications some of which are serious in nature. However, the incidence and seriousness of these complications as well as the burden of this complication on patient management are often underestimated. Identification of susceptible patients and the risk factors are important to ensure better outcomes.

Aims: The aim of this study was to document the various local complications of intravenous access and to identify the risk factors associated with it.

Settings and design: Prospective observational study with three hundred and one surgical patients. Study duration of 1 year.

Methods and material: Indication of IV access, site, size of IV cannula used, category of personnel involved as well as local complications at access site were documented. Dressing at cannula site were changed every 72 h or earlier. Cannula and site of access were changed in case of any complication.

Statistical analysis used: Results analysed using SPSS software (IBM Inc). Frequency calculated as average and percentage. Chi-square test used for statistical significance.

Relative risk calculated.

Results: Females, overweight, diabetics and smokers were found at more risk. Requirement of major surgery, IV access by paramedical personnel, IV access over joints and when kept beyond 3 days were found to have more complications. 5.7% of patients had serious complications requiring surgical intervention.

Conclusions: Our study shows that local complications at IV access site are very common with occurrence in more than fifty percent patients. Several risk factors are identified. Not all demographic and clinical risk factors are readily modifiable. However many of the complications can easily be minimized by following basic precautions.

Reference:

Chaudhary MK, Dhakaita SK, Ray R, Baruah TD. Local complications of intravenous access – an often underestimated entity. J Family Med Prim Care. 2020 Dec 31;9(12):6073-6077. doi: 10.4103/jfmpc.jfmpc_1649_20. PMID: 33681043; PMCID: PMC7928085.

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