INTRODUCTION

Neonates, infants and children are not merely small adults but they differ anatomically and physiologically from the adults. Successful anaesthetic management of paediatric patients necessitates adequate knowledge of these differences, so taking in consideration modification of anaesthetic drugs, equipments, techniques and fluid management *(Steward, 1995).*

The paediatric patient is more sensitive than the adult regarding circulatory volume changes. Volume overload as well as rapid dehydration can develop easily particularly during major surgery in the paediatric patients. Mismanagement of fluid and electrolytes still contributes to morbidity and death of infants and young children undergoing even the simplest procedures such as herniorrhaphies *(Filston, 1992).*

Failure to resuscitate paediatric patients from hypovolaemic deficiency states leads to multisystem failure and even death *(Scluster, 1988).*

Inappropriate overhydration during the stresses of anaesthesia and surgery can produce interstitial fluid shifts and pulmonary oedema leading to respiratory difficulties *(Moss et al.,1 996).*

The anaesthetist being the main person managing the patient before anaesthesia, during surgery, in the postoperative period and in the ICU, it is essential that he should have adequate knowledge about the fluid balance of paediatric patient during different types of surgeries to be able to assess the fluid needs of such patients, in the preoperative resuscitation phase, although surgical procedure and in postoperative periods.

AIM OF THE STUDY

This study has been suggested to discuss the role of the anaesthetist in fluid management of the paediatric patients in the preoperative, intraoperative and postoperative periods, types of intravenous fluids used for fluid therapy and monitoring of adequency of replacement.