the temperature of the circulating distilled water of the K-pads used in our operating rooms were, therefore, made at various settings of the thermostats of the heating units. The actual temperature of the liquid, among the various units tested, was found to differ from the thermostat setting by ±3.5° F. The errors were consistent for each unit (+1° F.) indicating that the thermostats were reproducing the same temperature at any given setting, but that the calibration was inaccurate. It seemed advisable because of these inaccuracies in calibration of the thermostat dials to measure the temperature of the circulating water continuously while the units were in use. As illustrated (fig. 1) a thermometer* was mounted in the filler cap of the heating unit with the sensitive element extending well below the liquid level. This modification of the K-pad has provided a reliable method of keeping the temperature of the warming blanket within safe limits.

* Bi-metal dial thermometer, range 0° to 180° F., 2½-inch stem length, Type no. 175-T, Weisker Instrument Corporation, Freeport, Long Island, New York.

Pediatric Reference Card

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Infants and children differ from adults in many respects, particularly in their reactions to drugs, parenteral fluids and anesthesia. The use of body surface, body weight, and age are well recognized valuable guides to determine proper dosage of drugs. During the course of anesthesia in infants and children a sudden emergency may arise and hasty calculation of a drug dose may lead to serious consequences.

At St. Luke’s Hospital Center we have been using a pediatric reference card to help avoid errors in drug dosage, and as a training aid. This card (fig. 1) is completed by each resident assigned a pediatric case on the next day’s operative schedule, and is reviewed by the attending anesthesiologist during pre-operative rounds. (Status = ASA classification,
CURRENT COMMENT

(Pediatric Reference Card)

ST. LUKE’S HOSPITAL CENTER — N.Y.C. — DEPARTMENT OF ANESTHESIOLOGY

Name________________________Sex_________Chart No__________Status__________

Operation________________________Surface Area (m²)________________________

Blood Vol. (ml)__________________Tidal Vol. (ml)________________Dead Space (ml)________________

Wt. (kg)________________________Height (cm)________________________

Prenedication, I.M.

Morphine or Demerol__________Scopolamine or Atropine__________
Nembutal or Seconal__________Other________________________

Muscle Relaxants (Initial Dose), I.V.

d-Tubocurarine (0.1-0.2mg/kg)__________Gallamine (1.0-1.5mg/kg)__________
Succinylcholine (0.4-0.8mg·kg⁻¹)__________

Muscle Relaxant Antagonists, I.V.

Edrophonium (0.015mg/kg)__________Neostigmine (0.01mg·kg⁻¹)__________
Atropine (0.015mg/kg)__________

Fig. 1.

Body surface = Dubois chart. Blood volume = as recommended by Dripps. Tidal volume = Redford nomogram. Dead space = as recommended by Dripps. Drug dosage = as recommended by Smith. Muscle relaxants and antagonists = as recommended by Foldes.

The recommended values for drugs and fluids are used as a base-line guide and adjustments are made depending on the state of patient, and on the contemplated surgical procedure. The amount of fluid necessary during a procedure may be difficult to determine in advance. We follow the amount recommended by Smith as a baseline (3 mL/100 lb./hr. of 10 per cent D/W). The reference card for the particular case is posted on the anesthesia machine to serve as a ready reference for the resident, the attending anesthesiologist or any other physician who may be involved with the case. We believe that the conscientious use of the reference has proven to be a useful clinical and training tool.

References

1. Dubois Body Surface Chart (as prepared by Boothby and Sandford of the Mayo Clinic). Available from Warren E. Collins, Inc., 555 Huntington Avenue, Boston.