paratively feeble, so that rigidity is less marked and is more easily overcome. Elasticity of the chest is at its maximum, so that artificial respiration can be easily and effectively performed. The blood-vessels also are more elastic, and by their contraction tend to counteract any fall in blood-pressure. The mucous membranes are more sensitive to irritation, and this is shown more particularly by the action of anæsthetics on the respiratory tract and stomach. Cough and mucus secretion are often easily excited, and vomiting tends to occur more rapidly and with less warning than in the case of adults. The nervous system is more sensitive, and reacts more quickly to stimulation; hence there is greater tendency to shock, and recovery from it is more rapid than in adults. Reflex action is more marked and also more quickly abolished by anæsthetics than in adults. This results in the first place in increased danger from such reflex effects as spasm of the glottis, which is a frequent source of danger. In the second place, the early abolition of reflex action results in the disappearance of certain guides which are habitually used in the adult, more especially the corneal and conjunctival reflexes, which in children are usually lost some time before anæsthesia is complete.

These reflexes are therefore of little use as a test of anæsthesia. A more reliable guide is that of smartly pinching the skin of the inner side of the thigh or of rubbing the ribs. If no movement results, the patient may be safely considered to be "under." Nervousness and fear are often strongly manifested, because in young children they are not checked by reason. The pulse is not quite so reliable a guide in young children as in the adult; but the "vascular reflexes," as pointed out by Paul Berger, may be used as a guide with confidence. If the finger-tip be pressed firmly on the edge of the lip, or the lobe of the ear, the rapidity and depth of colour of the vascular reflex may be observed and used instead of the pulse.

Preparation for Anæsthesia.—In preparing children for operation, it must always be borne in mind that the younger the child the more severely does it suffer from long deprivation of food. No child under eight or ten years of age should be left more than three hours without food, even before a major operation. In our opinion, in dealing with children, the important point is not so much the length of the fast as the nature of the food given during the few hours preceding operation, and we think that as a rule too little attention is paid to this point It is most important that nothing should be given before operation but easily digested liquids. Milk and bread and butter should not be given within five or six hours of an operation, and not at all if the operation is to take place early in the morning. Milk especially is a snare and a delusion, for the curds will, especially when a child is under the influence of fear, often remain undigested in the stomach for several hours. By far the best thing to give to young children is *whey*, which is easily absorbed and leaves no residue. In older children Bovril or good meat broth may be given. If the operation is to be a short one, and especially if it involves much shock or loss of blood (*e.g.*, removal of adenoids, circumcision, or osteotomy), the child may be given a light meal, as suggested above, four hours before operation, and some whey or broth about an hour previously. In the case of operations of longer duration, it is better to give the last meal about three hours before operation, and this should consist almost entirely of nourishing liquids (*not* raw milk). If the child be weak, a little brandy may be given in addition. In operations on out-patients and in private practice, the necessity for having the stomach empty is often not sufficiently impressed upon parents, who should be told to carefully watch the child to prevent its obtaining food surreptitiously; otherwise dangerous results may ensue during anæsthesia. Fear and excitement are very potent agents in retarding digestion, and we have known instances where children have vomited on the table an almost undigested meal of milk and farinaceous food five or six hours after its ingestion. Hence the necessity for giving liquid and easily digestible food, which even if it is vomited causes far less inconvenience and danger than does solid food.

Since children are so liable to shock, it is necessary that they should be well wrapped up, especially if the operation be upon the trunk. A hot-water bed is a great advantage. We wish to draw special attention to the practice of covering large portions of the child's body with wet antiseptic cloths. These rapidly become cold during the course of the operation, so that the child is practically operated upon in a cold wet pack. If the operation requires such antiseptic precautions, the cloths should be frequently changed and soaked in hot lotion, and a hot-water bed should be used when possible.

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