hours. Pontocaine ninety to one hundred and five minutes with perineal anesthesia between two and two and one-half hours. The mean duration of anesthesia with nupercaine was two hours and nineteen minutes. Perineal anesthesia from three to four hours.

Complications as to mechanism were insignificant. There was no significant increase under spinal anesthesia in low forceps deliveries preceded by manual or forceps rotation, nor in mid-forceps procedures.

Eighty per cent of the cases had a second stage of less than one hour.

With no oxytocic in the second stage 89 per cent of the placenta were delivered in six minutes or less, and 58 per cent in three minutes or less.

Episiotomy blood loss was not significantly different from that found by Odell and Seski.

Ninety-five of the infants breathed spontaneously in less than one minute after delivery. In only one per cent was respiration delayed over three minutes. In 80 per cent the initial cry was less than one minute.

Three neonatal deaths occurred. The cases were resorption atelectasis, congenital urethral obstruction and pneumonia.

In 94 per cent of the cases skin anesthesia was at the ninth or tenth thoracic segment. Five patients had anesthesia to the fifth thoracic and none higher.

There was no significant change in the blood pressure in 44 per cent and a maximum fall greater than 20 mm. Hg occurred in 26 per cent.

Fetal bradycardia below 100 beats per minute occurred in 11 instances.

There was an increased incidence in postpartum catheterizations as compared to a control group with general anesthesia.

Postpartum headache occurred in 14.5 per cent of all cases.

There were no postsipinal neurologic sequelae.

One maternal death occurred in the series due to massive right heart embolism twenty-two hours after delivery. The patient had a superficial thrombophlebitis ante partum.

Supplementary inhalation anesthesia was used in 13.5 per cent of the cases.

Seventy-two and two tenths per cent of all the cases had excellent results. In 20 per cent the results were adequate. There were 6.4 per cent poor results. 8 references.

C. A. H.


Anesthesiology, 100 years old in 1946, is a well established specialty today. After a period of enthusiasm following its discovery, there came a phase when its administration was delegated to the youngest and least experienced individual available. Following this came a period in which nurses trained in anesthetic administration were used, thus primarily improving only the art of administration.

The present development was stimulated by the demands of more extensive surgery with greater anatomic and physiologic disturbances resulting therefrom. It is now a combination of art and science.

A few of the functions of the present day anesthesiologist are discussed. Preoperatively the patient is evaluated physically and mentally to determine which agent and technic will give the greatest safety to the patient and best operating conditions for the surgeon. Apprehensive patients give the anesthesiologist more trouble, require larger doses of the agents, and have a less satisfactory anesthesia than the more calm and emotionally stable patients. "...Experience has shown that a patient who particularly desires a certain anesthetic agent will do better with
that agent, as far as an acceptable anesthesia goes, and that a patient who is outspoken against the use of a certain agent will have a 'rough' anesthesia if given that one." It may be better to bypass the agent and method of choice and select one less desirable to the anesthesiologist but more desirable to the patient.

During the operative period one must provide the maximum of safety and pain relief for the patient, and as ideal working conditions for the surgeon as possible.

Postoperatively the anesthesiologist is available for consultation and treatment of complications, such as atelectasis or paralytic ileus, and for advice concerning pain relief and fluid administration.

For all of this the anesthesiologist's training must include a general knowledge of medicine, knowledge of the basic sciences, as well as technical training.

The national organization is The American Society of Anesthesiologists, Inc., which publishes Anesthesiology bi-monthly. The specialty also has its certifying board and its Scientific Section in the A.M.A.

The specialty's future appears brilliant and its goal is the wider application of safer and better anesthesia.

From the findings of the Anesthesia Study Commission of The Philadelphia County Medical Society, it was determined that 47 per cent of the deaths resulting within twenty-four hours of surgery were preventable. Physicians trained in the specialty were responsible for 29 per cent of these; physicians training, for 38 per cent; others legally permitted, 58 per cent.

There will be more accepted residences; more satisfactory economic arrangements are being made; newer agents and more efficient equipment are anticipated; and the general anesthetic care of the patient will continue to improve. 5 references.

J. R. H.


This report deals with the action of d-tubocurarine, intocestrin (Squibb) and the dimethyl ether iodide of d-tubocurarine in rats, mice, rabbits, guinea pigs, cats, and dogs, with reference to toxicity, excretion, and effects on the cardiovascular and central nervous systems.

The dropping forward of the head, due to the selective paralysis of the neck musculature, is referred to as "head drop" (H.P.) and is a useful sign of curarization. The margin between L.D. and H.D. is the difference in the paralyzing dose for the intercostal and diaphragmatic muscles, particularly those of the neck. As might be expected, this difference is small and consequently there is a narrow margin between effective curarization and respiratory paralysis.

In the rabbit a significant number of head drops appear at 0.125 mg/kg. At the higher dose of 0.175 mg/kg, the number of head drops and complete paralysis increases and more animals require artificial respiration. Because of the clear cut differences observed in the range of 0.125 to 0.175 mg/kg, this range has been utilized in formulating the bioassay for determining curarizing potency of d-tubocurarine.

The toxicity in other species indicates that rats and guinea pigs are more sensitive, having a H.D. of 0.075 and 0.035 mg/kg, respectively.

In a series of 20 rabbits the antagonism of d-tubocurarine by neostigmine methyl sulfate was investigated. From these experiments it appears that neostigmine is more effective when given