tion was established five to ten minutes later, and the pulse became feeble towards the end of this period, but regained a satisfactory volume when the anoxaemia was corrected.

"Artificial respiration was maintained by rhythmic insufflation of oxygen through an endotracheal tube, and the patient's condition remained fairly good, in spite of the profound flaccidity. Spontaneous respiration began to return forty-five minutes after it had ceased, and was fully re-established in a few minutes. The laryngeal reflex became active ten minutes later. The patient did not regain consciousness, however, and during the next three hours she had a series of convulsions. From then, until she died six days later, the clinical picture was typical of grave neuronal damage following cerebral anoxia, with unconsciousness, convulsions, rigidity, mask-like facies and profound dementia. The histological findings were complicated by the presence of a malignant tumor occupying much of the cord and extending into the brain stem....

"Hitherto our knowledge of the effect of different concentrations of procaine on the vital centres has been derived mainly from laboratory animals, chiefly dogs. But results in dogs cannot properly be applied to man, since the quantity of C.S.F. available for dilution is very much smaller in the dog, and the relative susceptibility of the vital centres is different. This case provides direct evidence of the effect of a known amount of procaine in the cisterna magna of a human subject. ... The tumor may have rendered the neurones abnormally sensitive, but it is clear from a study of Courville's cases that the oxygen lack to which they were subjected could have caused similar damage in healthy neurones. In short, the supposition is that this dose of procaine intracisternally was enough to cause profound, but reversible, respiratory paralysis. The irreversible changes which killed the patient were due to anoxaemia." 9 references.

J. C. M. C.


"In a Scottish E.M.S. hospital, during a period of 27 months, 2,064 surgical procedures were carried out, 1,290 under general anaesthesia and 774 under regional analgesia, mainly by means of subarachnoid block. Many of the operations were for hernia and appendicitis, but most categories of general and special surgery, such as orthopaedies, gynaecology, plastic and ear, nose and throat surgery were included. A considerable number of the patients were workers in war industries and service personnel of both sexes. ... The postoperative complications ... include pulmonary collapse, pulmonary consolidation, and acute bronchitis. The term "acute bronchitis" was applied to cases which in addition to cough and purulent spu- tum showed a rise of temperature and well marked signs of auscultation. There was one death, that of a patient suffering from bronchopneumonia after operation for hernia under spinal block, and who, when resolution was almost complete, developed fatal pulmonary embolism on the sixteenth day after operation (confirmed by post mortem examination). Two further deaths occurred due to pulmonary embolism, both after operations for hernia under spinal analgesia. ... Sixty-three patients in the series of 2,064 developed pulmonary complications, an incidence of approximately 3 per cent....

"The form of general anaesthesia followed by respiratory complications was,
with two exceptions, nitrous oxide and ether. In 1 case, nitrous oxide and
vinyl ether anaesthesia was followed
by acute bronchitis, and in another,
unsupplemented nitrous oxide anaes-
thesia was followed by lobar consolida-
tion. . . . After thyroidectomy, collapse
occurred in 1 of 2 patients anaesthe-
tised without endotracheal intubation,
but did not occur in any patient who
had been intubated (nasal intubation
in all cases). One patient who had
an uneventful convalescence following
herniotomy under spinal analgesia, de-
veloped atelectasis within twelve hours
of having a similar operation per-
formed on the other side, again under
spinal analgesia. . . . All 12 patients
anaesthetised by local analgesia had
suffered from well marked chronic
bronchitis before operations; the 5 who
developed acute bronchitis had been
operated on for hernia. . . . Usually
the writer employed fairly heavy pre-
medication; the assistants tended to
premedicate more lightly. Postope-
rative medication with morphia was
light and was restricted as much as
pain and restlessness would allow. . . .
The majority of complications occurred
in males, and the highest incidence was
in the age group 30 to 40 years. . . .
The operations most commonly fol-
lowed by these complications were
herniotomy and appendectomy. Oblique
wounds may interfere to a greater ex-
tent with the abdominal component in
the mechanism of respiration than to
paramedian and midline incisions. Ex-
cessive tightening of muscles of the
abdominal wall during the hernial re-
pair may lead to reduced pulmonary
ventilation in the postoperative period
and so predispose to respiratory mor-
bidity. The method of anaesthesia em-
ployed did not appear to affect the
incidence of these complications, and
spinal analgesia does not reduce their
occurrence." 6 references.

J. C. M. C. MIDDLETON, D. S.: Experiences with
Chloroform as an Anaesthetic Agent: 
Summary of Lecture Delivered at
Edinburgh, on November 4, 1947.

"The Edinburgh Medical School has
always maintained that, provided it is
administered with care and certain
cardinal principles are observed, chloro-
form is safe within reasonable limits.
. . . Premedication was limited to atro-
pine, gr. 1/100 except in cases when ni-
trous oxide, supplemented if necessary
with ether or chloroform, was used.
In this case morphia gr. 1/4 and hyosine
gr. 1/100 was administered one and a
half hours before operation. This was
followed in one hour by morphia gr.
1/8 and hyosine gr. 1/100. If the pa-
tient was drowsy, the second dose of
morphia was not given. The standard
method in the wards where I super-
vised the anaesthesia was an induc-
tion with either C2Ea or chloroform,
using the Schimmelbusch mask covered
with two layers of lint. A separate mask
with 20 layers of gauze was used for
the change over to ether. . . . The ad-
dition of oxygen was found to pro-
long unduly the induction stage, and was
not used for that reason, but during
maintenance it was a routine procedure
to deliver small quantities under the
mask. . . .

"During these 14 years, 9,328 opera-
tions were performed. C2Ea mixture
was used for 4,050 cases. Nitrous oxide
supplemented by ether or chloroform
was administered on 876 occasions and
chloroform alone was the agent for
more than 500 operations. A series of
100 upper abdominal cases were anaes-
thesised with chloroform alone and no
noticeable increase of postoperative
sickness was observed. During this
period there were no fatalities due to
the use of chloroform or C2Ea mixture.
. . . My experience of anaesthesia in a
Japanese prisoner-of-war camp may be
of some interest and I remain con-