he could? We put the question to Dr. Neukirsch, who agreed this might be possible. He said that whatever form of artificial respiration is given to patients originally they became fond of it and were anxious and unhappy if it were changed. They get especially attached to the soda-lime bag because of the student who operates it for them. We, in England, find patients get just as attached to their tank respirators and have to be gradually weaned from them.

We then gently questioned Dr. Neukirsch on the matter of "tank respirators." Did he like them any better than previously, and would he in future use more of them? He told us that he was against the use of tank respirators. In future he intends to use more of the Engström and Kifa cuirass types of machines, combined with postural drainage. For this purpose he has ordered more of the special drainage beds. He also stated that he would be more conservative in the use of tracheotomy, but would not hesitate to perform it where he is certain that it is necessary. He remarked that he would not be adverse to experimenting with a tank respirator if the prone postural drainage position and suction could be obtained and maintained whilst in it.

He then took us to see the youngest patient with respiratory failure. The infant was admitted when six months old and had tracheotomy performed. Now, at fourteen months of age, he was receiving "finger-ventilation." He was flabby-fat and unhealthy looking. Finger ventilation was provided by a medical student alternately opening and closing the airway by lifting and lowering his right thumb over the lumen of the silver tracheotomy tube.

In passing we noticed that the resident medical staff took turns about, sleeping in a small room near the ward. They were on call for any "technical" breakdowns associated with "mechanical" students. Other questions which we put to Dr. Neukirsch at the end of his clinical were as follows:—

Question one: How many patients from last autumn's epidemic still require artificial ventilation of lungs by positive pressure?

Answer: Thirty-one in all. Fourteen have manual bag ventilation, 17 have mechanical ventilation of lungs.

Question two: Is the cuffed rubber endotracheal tube still in use?

Answer: Yes, in the initial stages. It is replaced by a silver tracheotomy tube as soon as possible.

Question three: Is the use of the soda-lime absorption by the semi-closed circuit preferable to the open circuit without the absorption of $C.O._2$?

Answer: A system without the soda-lime absorption is preferable to prevent dust from soda-lime getting into the lungs.

Question four: What "mechanical" students have so far replaced the medical students employed for manual compression of the bags?

Answer: The Engström, Bang and Aga machines. Also others are being tried out.

Question five: What types of chronic or semi-chronic patients are they now meeting, e.g., are there any with no recovery after pharyngeal paralysis, or any with partial recovery only?

Answer: There are none with no recovery; e.g., all have recovered save one with partial recovery only.

Question six: What results can they report from Bulbar patients who were posturally drained in the acute stage, in the supine or prone position, or in both?

Answer: 80 per cent. of such patients recovered; 50 per cent. had tracheotomy after postural drainage did not relieve the atelectasis.

Question seven: If Copenhagen suffered another epidemic, what procedure would be adopted?

Answer: As now. That is, postural drainage would be tried. If atelectasis continued, tracheotomy would be performed with suction. Manual or mechanical ventilation of lungs would be employed.

Question eight: Did Doctor think there was a future for the tank respirator?

There was no reply.

Question nine: If a tank respirator was invented whereby a patient's lungs could be drained comfortably in the prone, postural drainage position, would the Copenhagen doctors be interested?

Answer: Very interested indeed.

Question ten: Have any Nurses, Doctors or Medical Students, who have been in attendance on the patients, developed Poliomyelitis?

Answer: Not one—not even a query!!

(N.B.—Does this rule out the question that infection is passed via the upper respiratory passages?)

Question eleven: How is their continued experience with the curiass respirator getting on?

Answer: They think the cuirass respirator is not sufficient in the acute stage, but they like it in the convalescent stage.

Question twelve: What are the immediate effects of tracheotomy?

Answer: Startling! Some patients who had been unconscious for 4 days regained consciousness in a few hours and were alert and bright.

We thanked Dr. Neukirsch most sincerely for his kind forbearance and patience in answering our questions so fully. He then took us to see a new patient admitted the previous day. He was a Bulbo-spinal type, extremely ill with complete paralysis of the diaphragm and partial paralysis of intercostals, also both shoulders and arms were paralysed. On admission he was very cyanosed, with hyperpyrexia with a high blood pressure indicative of hypo-ventilation of lungs, and extremely restless and anxious. Tracheotomy was performed; manual bag ventilation through a soda lime absorber commenced through a cuffed rubber endo-tracheal tube. Immediately the boy appeared very peaceful with no trace of anxiety and he slept and rested well, and his cyanosis was relieved.

Dr. Neukirsch said, "It was as if a wand were passed over the child, taking away his restlessness, anxiety and bringing peace and contentment."

(N.B.—Similarly, a child, a girl of seven years, was brought to the Western Hospital, London. She had no cyanosis, but was restless and anxious and her intercostals were working very feebly. She was placed in an Australian Both tank respirator, and within five minutes all anxiety and restlessness disappeared and she was sleeping peacefully.)

On Tuesday, the day following, we went straight away to visit a new patient. His temperature was falling nicely and he appeared much improved. He was receiving very vigorous lung therapy and massage, even though his X-ray showed no atelectasis. Suction through the tracheotomy tube was also being carried out, rendering the boy very cyanosed and uncomfortable during the operation. Nasal feeding was then commenced through a catheter passed down the right nostril and strapped loosely to the cheek. A 20cc. syringe was used for the purpose. Kenny packs and gentle stretching of muscles was commenced very shortly afterwards—indeed as one treatment followed another in quick succession, we guessed he would be ready for sleep at the first opportunity.

We then joined the general clinical medical round and noted that much the same infections were encountered in Copenhagen as in London, e.g., Sonné dysentery, and all the other dysenteries; gastro-enteritis; measles; chicken-pox; Streptococcal infections, and so on, and we marvelled at the apparent smallness of the world! Afterwards, during our observation period, we watched patients being carried from the wards to the gardens. Again it was a gloriously cloudless and extremely hot day. Garden stretchers with hoods to keep the sun from the patients' heads were strewn about the lawns. Patients in sun-suits and with lovely brown, sun-tanned skins were basking in the open on their stretchers or beds, and they looked comfortable and happy indeed. One almost forgot the hospital environment, and expected so see rippling waves

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