NOTES ON LEECH INFECTION IN THE MIDDLE EAST.

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Since time immemorial the leech has been a source of trouble to the population in the Middle East and the symptoms caused are well recognized.

Gideon was wise to the potential danger of the leech when he chose his army of 300 men—'So he brought down the people unto the water: and the Lord said unto Gideon, Everyone that lappeth of the water with his tongue as a dog lappeth, him shalt thou set by himself; likewise everyone that boweth down upon his knees to drink.

And the number of them that lapped, putting their hand to their mouth, were three hundred men, but all the rest of the people bowed down upon their knees to drink water.'

Several species of leech are found in Palestine and N. Africa, Limnatis nilotica being the most common. Drinking water from wells is a source of infection. The young leeches are only 3 mm. long. They attach themselves to the mucosa of the mouth, nose, larynx or trachea, remaining and growing there until they cause symptoms. They may cause headache and obstinate epistaxis resulting in severe and fatal anaemia. Sometimes the bite becomes infected and an ulcer is formed.

In Hirudine there are three semi-circular jaws having from 50 to 100 sharp teeth. The salivary glands are situated inside the mouth cavity, and secrete fluid preventing coagulation of blood. When the leech becomes detached from the mucosa the wound continues to bleed because the effect of the salivary secretion in retarding coagulation is of some duration.

We learn that the Limnatis nilotica is a source of trouble to the French troops in Algeria. Napoleon's Army in its retreat through the Sinai Peninsula was also inconvenienced by the leech. Several cases of leech infection were observed in British Troops in Egypt and Palestine in the last war.

It is for these reasons that the report on two cases may be of interest to medical officers serving in the Middle East at the present time, especially those "in the field."

Both patients were adult Arabs from Northern Palestine. They complained of "something moving in the throat," making them cough. They were both aware of the nature of the foreign body. They were accustomed to drinking well water.

Attempts at removal had been made by the patients themselves with their own fingers. Removal with forceps by means of indirect laryngoscopy had also failed.

The patients were shown to me at this stage. Both were coughing and
salivating freely, the saliva being blood-stained. Both were hoarse but not unduly distressed.

Indirect laryngoscopy revealed a blood-stained oedematous larynx with injected vocal cords. Nothing else was visible on inspiration. At the end of expiration a small shiny brown body presented itself between the cords. This was the unattached end of the leech which was blown out of the trachea by the expired air. It was sucked in again during inspiration and disappeared from view. Diagnosis, leech in trachea.

In both patients leeches were removed by direct laryngoscopy under general anaesthesia. Ether vapour appeared to have no effect on the leeches which were grasped with Patterson forceps. Considerable force was required to remove them from the mucosa. There was no undue bleeding from the trachea after removal.

The leeches were alive and undamaged, they measured 1.5 cm. and 3.5 cm., after being killed in 10 per cent formalin in normal saline.

If local anaesthesia be used (cocaine spray and laryngeal syringe) with the patient in the sitting position, a bronchoscope should be ready for immediate use in case the leech becomes detached and falls down the trachea or into a bronchus.

Even using a general anaesthetic it is reassuring to know that a bronchoscope is available.

**SUMMARY.**

1. Notes on leech infection of historical interest.
2. Source and manner of infection and symptoms which may be caused.
3. Report of two cases of leeches in the trachea, presenting with cough and haemoptysis.
4. Advisability of having a bronchoscope available during removal of leeches from the trachea.