

Nor are the organisms necessarily introduced from without. If, for instance, we take a swabbing from the mouth of a healthy person and pass it over the surface of a number of tubes containing substances on which bacteria can easily grow, we find that after a time these tubes contain a large assortment of many different kinds of germs, such, for instance, as are responsible for diseases like consumption and various kinds of inflammation of the lungs. But we do not suffer from these ailments, though we have their germs in our mouths, and the reason is that in health the white corpuscles of the blood are able to keep them in subjection, so that they stay in the mouth, and do not get into the system at all.

But if the healthy man gets his resistance lowered, say by subjecting his respiratory organs to very sudden changes of temperature, the white corpuscles are temporarily weakened, so that the germs multiply and then attack them. A fight is established, and the patient is said to be suffering from the particular disease. It is then easy to see how catching cold gets blamed for a disease for which it is only partly, and not even mainly, responsible.

Whatever the cause, however, the result is in the case of respiratory disease at first the same—namely, the process that we know as inflammation. The germs multiply, and white corpuscles are called up in numbers to fight them. Part of this combat takes place at close quarters, and the corpuscles then devour the germs or *vice versa*, but for the most part the fighting is not of this hand-to-hand character, but the germs secrete a poison (toxin) and the corpuscles an antidote to it (antitoxin), and these neutralise one another, and whichever is then left over poisons the opposite party. In any case, the result is a quantity of dead bodies, both of cells and corpuscles.

Clinically, the first sign of inflammation of a part is that it becomes red, swollen, hot, and painful. Then the affected part pours out a secretion which contains the dead bodies aforesaid, sticky mucus to bind them together for more easy removal (and to soothe the inflamed part) and water to wash them away with. This secretion continues as long as the fight goes on, and ceases with the death or recovery of the patient.

(To be concluded.)

It is reported that there is a recrudescence of sleeping sickness in some districts of the Congo, and that in some villages 25 per cent. and more of the children are suffering from it. The situation is very serious.

Notes on Ophthalmic Nursing.*

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(Concluded from page 185.)

Now let me demonstrate to you the following procedures:—

1. How to remove a foreign body from the conjunctival sac.
2. How to remove a foreign body from the cornea.
3. How to remove ingrowing eyelashes—epilating forceps.
4. How to apply drops to the eye—by means of a dropping tube, drop bottles, Chalk's, Stroschein's.
5. How to cleanse the lid margins, remove crusts of dried secretion, or parasites, and prevent scabs.
6. How to douche the conjunctival sac—cotton wool non-medicated—Undine.
7. How to douche the tear sac—syringe. (N.B.—Irrigation of the anterior chamber of the eye is employed by some surgeons—*e.g.*, at the operation of cataract extraction, but a nurse's only duty is to see that the apparatus and saline solution is irreproachably sterile.)
8. Credé's method of prevention of conjunctival infection, its general application, and its special value in maternity cases. A 2 per cent. solution of nitrate of silver.
9. The necessity of early douching after application of nitrate of silver.
10. The necessity for frequent douching in acute infection, avoidance of irritant lotions or corrosive wool. Simple saline solution or boric lotion the safest, combined with 20 per cent. solution of argyrol 2-hourly. The same lotion not to be used twice over.
11. The application of ointment. (a) To the lid edges; (b) to the conjunctival sac with a glass or other smooth rod.
12. How to prepare and apply Buller's eye shield. A strong watch glass between two pieces of sticking plaster leaving a circular central window.
13. How to apply a protective dressing to one or both eyes.
14. How to support it with a single or double roller bandage.
15. Liebreich's bandage applied to one or both eyes.
16. The application of rubber plasters, or the use of paper tape plasters.
17. Blood letting from the temple by leeches, natural or artificial, wet cupping, blistering the temple.

* A lecture delivered to nurses at the Royal Infirmary, Edinburgh, February 23rd, 1910.

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