Nursing of Diseases of the Eye.

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AFFECTIONS OF THE IRIS.

As soon as the presence of iritis is diagnosed the chief indication is to put the iris at rest in a position where it cannot readily form adhesions, and where they will do least damage if they are formed in spite of our endeavours. This is done by producing mydriasis through the instillation of atropine. It is not always easy to say whether the iris has already formed adhesions or not; a drop of comparatively weak atropine solution, gr. ij. ad ℥j., will, in half an hour, dilate the pupil sufficiently to allow this to be seen. Where it is evident from the regular dilatation produced that no adhesions are present, it will be sufficient to maintain mydriasis in most instances by using these drops three or four times a day. When the pupil is slow in dilating it may either be due to the presence of synechiæ, or to the infiltration of the iris tissue by lymph. In either case it is equally important to gain, if possible, maximum mydriasis, and for this purpose atropine must be pushed hard. I usually employ an ointment containing 8 gr. of atropine and 10 gr. of cocaine to the ounce of vaseline, and have this put in the cul-de-sac every three or four hours for a whole day.

By this time the pupil will usually have dilated at least partially, and recent adhesions will have broken down or will be stretched to the outmost. The constant steady pull will usually burst them in a few days. If the pupil has dilated completely, the ointment may be continued twice daily as long as the injection persists. If the pupil shows any signs of recontraction, more frequent applications must be made. If, on the other hand, there be no dilatation of the pupil, I usually continue the use of the ointment three or four times daily until the eye becomes quiet. In any case, the drug should be diminished gradually.

The ointment, being gradually absorbed locally, is, as a rule, better borne than atropine drops, which are carried down through the lachrymal passages to the throat, and sometimes produce symptoms of general poisoning.

When the pain is severe, local blood-letting by leeches often relieves it entirely. They should be placed in a test tube with the mouth against the skin near the outer canthus, and, if reluctant to bite, may be induced to do so by smearing a little milk on the skin. The leech will absorb about ʒiss. of blood. Three or four may be applied, and, if more loss be required, the flow may be continued after the leech has dropped off by warm bathing.

In the absence of the natural animal, Harrteloup's artificial leech is sometimes employed, but is at once more painful and less convenient.

As we have already described, an incision is drilled in the skin by a knife, which is revolved rapidly on the release of a spring; over this is placed a small cylindrical air pump; the margin, well greased, is pressed firmly on the skin surrounding the incision. By withdrawing the piston a partial vacuum is created over the wound and the blood is drawn into the cylinder to fill it. The quantity to be abstracted can be readily measured and modified at will.

Local anæsthetics, cocaine and eucaine, have little or no effect on the pain of iritis and cyclitis. Recently dionine, a derivative of morphia, has been suggested to relieve the deep pain; if dropped into the eye in 5 per cent. solution five or six times at intervals of five minutes, it exercises a very considerable analgesic effect. It is hardly at all anæsthetic, however, and therefore cannot replace cocaine for operations. The immediate result of the solution is to cause pretty severe smarting, and after two or three drops have been instilled the nurse will notice a considerable œdema of the lids come on. The drug has, besides its analgesic effect, some influence on the iris; although not itself a mydriatic, it assists atropine considerably in producing dilatation of the pupil. In some cases of obstinate iritis, when the pupil in spite of even strong atropine has remained firmly contracted, the addition of dionine seems to give rise to immediate and lasting mydriasis. The œdema is an important factor in the production of analgesia; at least, if the œdema do not appear, there is no relief of pain.

Should the pain continue, heat is often a valuable aid in its relief; we can make good use of a "muff-warmer," as described in an earlier lecture. A thin pad should be placed on the eye, and over this the stove, wrapped in a piece of flannel, is secured by a turn of a bandage. No inflammable material, such as cotton wool, should come in contact with the stove. It is, from the construction, most unlikely that any sparks escape, unless the whole be turned upside down, but no precaution should be avoided to prevent an accident. It remains equably heated for some two and a-half hours, and is much more soothing and convenient than any fomentation. The stove must never be applied directly without a thick layer of flannel or woollen stuff, otherwise the skin may be blistered by too great heat.

Usually under this treatment the pain subsides, the pupil dilates, and the injection gradually disappears. Our whole object is to keep the inflamed part at rest, and this the atropine does effectually when the adhesions have been broken down. The addition of cocaine makes the vaso-constriction effect more marked, and thus aids in the reduction of the inflammation.

Occasionally the atropine is not well borne, and

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