THE RELIEF OF PAIN.

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We have seen in the last paper that pain is due to an impulse passing from a nerve ending up an afferent nerve to the cortex of the brain, and that when we want to relieve it we try first of all to take away from contact with the nerve ending the source of the irritation, and that, failing this, we can paralyse the nerve endings by drugs such as cocain, so that the impulses do not reach the brain at all. If neither of these plans is possible or advisable, we can still act on the cells of the brain itself so that, though the impulses reach that organ, painful impressions do not result. It was mentioned that this might be effected mainly by drugs derived from opium, or by coal tar derivatives such as antipyrin, phenacetin and the like. We will now study these two groups more carefully.

The first advice, however, which must be given to anyone who proposes to use the opium group is roughly that given by Mr. Punch to those about to marry—don't! And for this reason: it is impossible to avoid doing a certain amount of harm. It may well be that the continuance of the pain would do more harm still, but we must always be sure of this point before using opium or its allies.

Now opium does not act only on the cells of the brain that are responsible for the perception of pain. It also, for instance, checks the movement of the intestines so that constipation results; then, too, it not infrequently gives rise to vomiting and a splitting headache after the pain has been relieved. And there are other effects, which are more or less objectionable, but as this is not a discourse on opium they need not be mentioned in detail.

One disadvantage it has, however, which is most important in connection with abdominal pain. Just as it relieves the pain itself, so it dulls the reflexes and calms down the patient generally; consequently symptoms which would otherwise point to the existence of grave intraabdominal trouble, such as the perforation of an ulcer of the stomach or bowel or a gangrenous appendix, may escape notice. Nothing can be more disastrous than to make opium take the place of abdominal section, and for this reason it is a cardinal rule never to give opium or any of its derivatives in abdominal pain unless we are absolutely sure that we are not dealing with a "surgical" lesion. We should generally avoid its use, therefore, both in appendicitis and in enteric fever. In these

conditions it is better to use local measures acting on the nerve endings themselves, such as hot fomentations, or sometimes preferably an ice bag, applied to the abdomen itself. But this really comes under the head of always thinking first whether we cannot take away the source of the pain by surgical means.

Coming back to opium, however, we can give it by the mouth, or in the form of morphia hypodermically, but we always have to remember-especially with hypodermic medication—the danger of setting up a habit on the part of the patient. We must recognise that the temptation to the patient to seek relief in the almost magic effect of a hypodermic injection is very considerable, and if he knows what we are giving him in this way he is very likely to buy a syringe and repeat the experience on his own responsibility whenever he is in pain. Nurses, in particular, should be very careful never to let a patient know what a hypodermic injection is composed of. Many women have lapsed into the morphia habit because someone has injudiciously given them morphia for a pain that is likely to recur at a future time, such as periodical discomfort associated with menstruation, for instance.

Drugs of the antipyrin group are as a rule free from grave risk of a resultant habit, but they all have this disadvantage, namely, that they depress the heart. In the earlier epidemics of influenza, for instance, many patients lost their lives from heart failure, due to over-doses of these drugs. I have said "as a rule," but I am afraid that the habit of taking these compounds in tablet form for headache is on the increase; especially, by the bye, amongst nurses-who seem to have an abnormal liking for aspirin in particular. The bad effects of this and allied drugs is shown in fits of sleeplessness, depression and slackness, and ulti-mately in so-called "nervous breakdown." Unless the headache is very severe, it is better to bear it than to resort to these treacherous friends, and it is greatly to be wished that they could not be purchased in unlimited amounts with the same facility as a pound of tea. Most of the proprietary "headache powders " which are so freely advertised contain these drugs, often in dangerously large amounts.

But after all they are usually preferable to morphia, and I cannot help dwelling for a moment on the usefulness of aspirin after abdominal operations. Here we must relieve the pain somehow, as it is usually pretty severe, and we cannot uncover the wound and put on a fomentation, without risk of infecting it. If we give opium we ultimately increase the pain by producing distension of the intes-



