CHRONIC PAIN

Y. K. BOSMAN* M.B. B.Ch. (Wits.), F.F.A. (S.A.)

In recent years there has been renewed interest in the pathophysiology of chronic pain and methods of treating it. The problem has been spotlighted by the staggering figures of lost man-hours to the American economy and the colossal payments for temporary and permanent pain disability claims. Chronic pain has even been described as the most common disabling disease in the U.S.A. This in spite of modern science and the fact that pain has plagued Man since his beginning.

We are not able to measure pain in any units since the pain experience is a subjective phenomenon, and for this reason assessment of treatment is also subjective. This, and perhaps other reasons, are responsible for certain pain paradoxes; for example some pain studies show that narcotics are not analgesic in 10% of post-operative patients, and that placebos provide relief in 20% (Anon, 1973). It is understandable that our treatment of pain is often inadequate with our poor understanding of pain physiology, for the latest research does not take us beyond the barrier of the theory and we still await proof of what happens to the pain impulse after it enters the central nervous system in Man.

What are the theories of pain? The textbooks still mention the specificity and pattern theories. The Specificity Theory, put forward in the middle of the last century, stated that free nerve endings were pain receptors, and stimulation generated pain impulses which were carried by peripheral nerves via the spinothalamic tract to a pain centre in the thalamus.

The Pattern Theory, put forward at about the turn of the century, stated that stimulus intensity and central summation were the critical determinants in pain appreciation i.e. a certain spatio-temporal pattern was necessary.

* Anaesthetist, Tygerberg Hospital.