



dibenz [*b, f*] oxepine has an appreciably non-planar middle ring. Its overall molecular shape closely resembles that of tricyclic analogues containing 6- and 7-membered rings, viz: phenothiazine, and dibenz [*b, f*] azepine.

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## The effects of paracetamol on temperature and cardiovascular changes caused by pyrogenic contamination of chronically implanted arterial cannulae in the conscious, renal hypertensive cat

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The use of chronically implanted arterial cannulae to facilitate the recording of arterial pressure in conscious animals is a well established technique. The cannulae are commonly used with an arterial valve (Day & Whiting, 1972) to allow convenient connection to a pressure transducer.

We have used this technique in cats with mild, perinephritic, experimental hypertension (Page, 1939; Poyser, Shorter & Whiting, 1974). Aseptic surgical techniques were employed. PVC cannulae, sterilized overnight in 0.5% alcoholic Hibitane (ICI Ltd.), were inserted in the right carotid artery to the level of the thoracic aorta and were kept patent by injecting 2 ml of sterile heparinized (150 I.U. ml<sup>-1</sup>, Pularin, Evans Medical), saline (Steriflex No. 1, Allen and Hanburys Ltd.) every second day. Rectal temperature was recorded with an electronic thermometer. A Bell and Howell 4-422-0001 pressure transducer and a Devices M.19 polygraph were used to record arterial pressure.

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Heart rate was calculated from the pressure trace. Measurements were made at 15 min intervals. During observations the animals were lying unrestrained in their home cages. Ambient temperature was from 21 to 24°.

Pyrogen-like reactions were often observed, beginning 0.75 to 1.0 h after an injection of 2 ml of sterile, heparinized saline, used to clear the arterial cannula at the start of each experiment. Dey, Feldberg & others (1974) have observed a rise in rectal temperature in the cat following intracerebroventricular injection of sterile saline. The effect was prevented by pretreatment with chloramphenicol, suggesting bacterial growth in the cannulae as the source of pyrogen.

In our animals the presence of pyrogens was confirmed by withdrawing 0.5 ml of saline from the arterial cannulae of 5 cats, 18 h after washing through with sterile heparinized saline. These samples were pooled and compared with equivalent volumes of fresh heparinized saline in a standard pyrogen test in groups of 3 rabbits. The sum of the maximum temperature