EXPERIMENTAL RESEARCH ON THE ACTION OF ANTIPYRINE.[1]

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The antipyretics may be classified according to either their chemical construction or their clinical action. *Les Nouveaux Remedes* (1895) divides them into the following six classes (1) Phenols; (2) Aromatic acids; 3) Anilides: (4) Phenylhydrazin; (5) Quinolin; (6) Pyrrol, Laborde divides them into (1) Fundamental analgesics and (2) True Antithermics which are also antiperiodics.

The following extract from the British Medical Journal (March. 1894) expresses so very fully the usually accepted views of the physiological action of antipyrine that I quote it at length. "All the aromatic compounds have a definite action upon protoplasm and to this as Schmiedeberg points out the influences upon the temperature and metabolism in febrile states are probably related. Antipyrine acts on the cerebro-spinal nervous system, in moderate doses effecting a fall of temperature and slightly raising the blood pressure. This action on the heat mechanism has received widely different interpretations and experiments have only yielded contradictory results. Wood and others hold it is due to decreased heat production, while Gottlieb from calorimetric observations affirms that antipyrine quickens the heat dissipating mechanism. However that may be, large doses depress the nervous system and lower the blood pressure, and symptoms varying from an unpleasant diaphoresis to severe collapse have been met with after administration. . . Marked palpitation and disturbances of the heart's rhythm are not uncommon and while these symptoms are referred with some probability to changes in the vasomotor system we cannot altogether exclude a toxic effect upon the cardiac muscle. This should be borne in mind in acute pneumonia where cases of death after antipyrine have been recorded. Again the cardiac and respiratory systems may be influenced directly through the medullary centres; or on the other hand secondarily from changes in the hæmoglobin of the red blood corpuscles resulting in methæmoglobin-æmia. This is seen in various degrees of cyanosis which is so common. . . In small doses antipyrine acts as a stimulant to the nervous system, and like quinine and salicylic acid may induce a

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