The recognition of thalidomide as a teratogen has aroused great interest in the relationships between drugs administered to mothers during pregnancy and the occurrence of malformations in the offspring.

Experiments performed in this field led to the discovery of a great number of teratogenic agents. Among these are physical factors, like X-ray and anoxia; infections such as rubella, toxoplasmosis, pig cholera and rickettsia; and a very large variety of chemicals. Among chemical compounds are poisons, industrial dyes, solvents and various drugs. Some of these drugs are toxic like the anti-tumor drugs while others have low or no general toxicity, like hormones, antivitamins and tranquilizers.

Many antibiotics were found to disturb the development of the embryo in some mammalian species. Among these antibiotics are; penicillin, streptomycin, tetracyclin, actinomycin D, actinomycin C, mitomycin C, sarcomycin, carzinomycin, chromomycin A2, streptonigrin, hadacidin and a long acting sulphonamide. Nevertheless, the literature is entirely lacking the effect of chlor-
amphenicol on the embryonic development in mammals.

Among the most commonly used drugs are analgesics. It has been demonstrated that salicylates, including sodium salicylate, methyl salicylate and acetyl salicylic acid, can produce malformations in rodents. Only a few publications seem to deal with the embryo-toxic effect of phenylbutazone, although it has been clinically used since 1949.

The aim of this work is to investigate the effect of chloramphenicol and phenylbutazone on the foetuses of an inbred strain of the albino mouse, when each drug is maternally administered, during different periods of embryonic development.

In the pertinent literature, the judgement that a drug can affect the embryonic development was based mainly on morphological studies. The present investigation comprised: morphological examination of the foetuses obtained, macroscopic examination of the foetal skeleton made visible by clearing technique, and microscopic examination of serial sections of the whole foetus for the detection of internal abnormalities.