These results with the present results suggest that increased dose or prolonged treatment of HCG is deleterious to gestation.

Yoshinaga et al11 have shown that daily doses of 10  $\mu$ g and 25  $\mu$ g LH are found optimal for the maintenance of pregnancy, as higher or lower doses are less effective; higher doses of LH may stimulate the secretion of estrogen more than that of the progesterone, leading to resorption of foetuses11. Even in the present study, the foetal loss after HCG treatment may be because of high estrogen production leading to the resorption of the embryos, as no vaginal bleeding is observed. The persistentance of placentomas in the uterus observed on day 20 of pregnancy also supports that foetal loss is mainly due to resorption and not due to abortion. Though the ovaries of HCG administered, barbiturate treated rats are significantly heavier with large corpora lutea, they do not show normal histological appearance which may be partly due to the luteolytic activity of HCG and partly due to absence of placental gonadotrophins 16, 17. However, exact dose and duration of the administration of HCG to maintain the pregnancy in barbiturate treated rats is to be studied.

## **ACKNOWLEDGEMENT**

This investigation was supported by UGC and Karnatak University. Thanks are due to May and Baker (India) Private Ltd., for the gift of phenobarbital and to Ayerst Lab. Inc. New York for the gift of HCG. The author is grateful to Dr M. Appaswamy Rao, Rtd. Prof. and Head of the Department of Zoology,

KUD for his valuable suggestions and encouragement during the tenure of this investigation.

## 18 November 1983

- 1. Everett, J. W. and Sawyer, C. H., Endocrinology, 1950, 47, 198.
- Ying, Y. and Meyer, R. K., Endocrinology, 1969, 84, 1466.
- 3. Wedig, J. H. and Gay, V. L., Neuroendocrinology, 1974, 15, 99.
- 4. Beattie, C. W. and Schwartz, N. B., Proc. Soc. Exp. Biol. Med., 1973, 142, 933.
- 5. Okamoto, M. T., Nobunaga, T. and Suzuki, Y., Endocrinol. Jpn, 1972, 19, 11.
- 6. MoCormack, C. E. and Mann, B. G., Proc. Soc. Exp. Biol. Med., 1974, 146, 329.
- 7. Franchimont, P., Eur. J. Clin. Invest., 1970, 1, 65.
- 8. Wide, L., Acta Endocrinol. Suppl., 1962, 70, 1.
- 9. Yogo, I., Endocrinol. Jpn, 1969, 16, 215.
- 10. Zeilmaker, G. H. and Moll, J. Acta Endocrinol, Copenh., 1967, 55, 55.
- 11. Yoshinaga, K., McCdonald, G. J. and Roy, R. O., Proc. Soc. Exp. Biol. Med., 1972, 146, 893.
- 12. Sindgi, S. B., Ph. D. Thesis., Karnatak University, 1975.
- 13. Loewit, K., Badawy, S. and Laurence, K., Endocrinology, 1969, 84, 244.
- 14. Moudgal, N. R., Nature (London), 1969, 222, 286.
- 15. Yang, W. H. and Chang, M. C., *Endocrinology*, 1968, **83**, 217.
- 16. Astwood, E. B. and Greep, R. O., Proc. Soc. Exp. Biol. Med., 1938, 38, 713.
- 17. Averill, S. C., Ray, E. W. and Lyons, W. R., Proc. Soc. Exp. Biol. Med., 1950, 75, 3.

## ANNOUNCEMENT

## PANDIT JAWAHARLAL NEHRU AWARD FOR SCIENCES

The First Pandit Jawaharlal Nehru Award for Sciences has been awarded to Dr. Avtar Singh Paintal, Director, Sardar Patel Chest Institute, New Delhi presented by Mr. Zail Singh, the President of India. The Award was instituted by the Madhya Pradesh

government to promote excellence in sciences and to give recognition in outstanding contribution to sciences, the Award carries a cash prize of Rs. 1 lakh, a plaque and a citation.