than male rats by 40–60%, and at night higher than noon by 16–18 fold in both sexes.

In P treated groups, the reductase activity increased at noon to 180% and 140%, for male and female respectively compared with respective control values. At night the activity of male was not altered significantly, although that of female increased 140%.

In S treated groups, the activity at noon increased to 140% and 180%, in male and female respectively, but decreased at night to 38% and 36%, in male and female respectively.

In D treated groups, the activity of male decreased to 80% and 60%, at noon and night respectively. In female the activity decreased to 40% but at noon increased 2 fold that of control value.

Plasma Pancreatic Glucagon in the Patients with Various Liver Diseases

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Plasma pancretic glucagon concentrations were determined in the patients with various liver diseases. After overnight fasting, the patients and normal subjects received an intravenous infusion of 30 g of l-arginine over a period of 30 min. Blood was withdrawn before and 15, 30, 60, 90, 120 min after the start of the infusion.

Plasma pancreatic immunoreactive glucagon (IRG) was determined by the radioimmunoassay with antiserum 30 K.

In the patients with acute hepatitis and liver cirrhosis, plasma IRG concentration in the basal state was almost three times greater than that observed in the control subjects. In the patients with acute hepatitis, chronic hepatitis and liver cirrhosis, plasma IRG response to arginine was significantly greater than in the control subjects.

In the patients with liver cirrhosis, the prolonged disappearance curve of injected exogenous glucagon was observed.

Correlation between the maximum concentration of IRG after arginine infusion and liver function tests in the patients with chronic liver diseases was studied.

The correlation between response of IRG and concentration of serum albumin was significant. But the correlation between response of IRG and another liver function tests was not significant.

Plasma Prolactin and Breast Cancer

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Plasma human prolactin concentrations were measured using a commercially available radioimmunoassay kit (CIS) in 46 patients with breast cancer and 42 female hospital controlls. Mean plasma human prolactin levels in female controlls 15.20 ± 8.05 ng/m*l*.

In 12 patients with primary breast cancer receiving radical mastectomy and postoperative irradiation (aged 30 to 71 years, mean 48.3 years), mean plasma human prolactin levels were 16.92 ± 12.05 ng/m*l*.

In 34 patients with advanced breast cancer (aged 33 to 60 years, mean 46 years), mean plasma human prolactin were 26.49 ± 26.72 ng/m*l*.

In 13 patients who received oophorectomy (aged 33 to 55 years, mean 43.3 years), mean plasma human prolactin levels were 35.62 ± 37.39 ng/m*l*.

In 17 premenopausal patients (aged 31 to 53 years, mean 41.9 years) mean plasma human prolactin levels were 19.24 ± 10.74 ng/m*l*.

In 11 postmenopausal patients (aged 52 to 72