The state of the proteolysis system in the basal ganglia of the brain under the conditions of an altered photoperiod

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The effect of an altered photoperiod (constant light, constant darkness) on the activity of proteolysis (albumin, casein, collagen lysis) in the basal ganglia of the brain was studied. The activity of the enzymes that break down casein was increased under the conditions of light: in the globus pallidus ($F_{1,12} = 21.83, p = 0.0005$) and in the amygdala ($F_{1,12} = 7.33, p = 0.019$). The albumin lysis was increased in the nucleus accumbens ($F_{1,12} = 6.72, p = 0.024$), the collagen lysis in the nucleus accumbens ($F_{1,12} = 16.32, p = 0.002$), in the globus pallidus ($F_{1,12} = 61.42, p = 0.0005$), in the amygdala ($F_{1,12} = 22.07, p = 0.0005$). The decrease of the azoalbumin proteolysis in the nucleus caudatus ($F_{1,12} = 22.28, p = 0.0005$), and azokazein proteolysis in the nucleus accumbens ($F_{1,12} = 27.41, p = 0.0002$) under the conditions of darkness was seen. The lysis of collagen in all these structures was increased ($F_{1,48} = 34.26, p = 0.0001$) under the influence of darkness. Thereby the substantial change of photoperiod is accompanied by desynchronosis rhythm, simultaneously the inhibition of the epiphysis function was accompanied by an increase of the proteolysis activity in the basal ganglia, and the increase in the epiphyseal activity causes heterodirectional changes of the proteolysis parameters of the mentioned structures of the brain.
1-й группы (14 пациентов) проводилось полное парентеральное питание (ППП) круглосуточно. Больным 2-й группы (18 пациентов) ППП проводилось с 8-00 до 20-00. В 1 группе в ночное время на фоне проводимого ППП увеличивалось в крови содержание холестерина, мочевины, калия, магния. Уровень общего белка статистически значимо нарастал с 5-х суток после начала ППП. Во 2-й группе показатели биохимических параметров крови не изменялись в течение суток. Концентрация общего белка статистически значимо нарастала с 3-х суток после начала ППП. Таким образом, результаты показывают, что ППП следует проводить в дневное время суток.

PARENTERAL NUTRITION AMONG SURGICAL PATIENTS
WITH THE REGISTRATION OF CIRCADIAL RHYTHM

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The peculiarities of parenteral nutrition in post-operative period with 22 patients, after extensive operations on the intestines, were studied. Group 1 had a full parenteral nutrition (FPN) during 24 hours. Group 2 (18 patients) had FPN from 8:00 till 20:00. In the 1st group during the night the levels of cholesterol, urea, K, Mg in the blood had been increasing on the background of FPN. The level of general protein had been increasing statistically importantly from the 5th day and night after the beginning of FPN. In the 2nd group the indexes of biochemical blood parameters hadn’t changed during 24 hours. The concentration of general protein had been increasing statistically importantly from the 3rd day and night. Thus, the results show that FPN should be carried out during the daytime.

ХРОНОПАТОЛОГИЯ И ХРОНОТЕРАПИЯ
ЯЗВЕННОЙ БОЛЕЗНИ

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В основе развития язвенной болезни (ЯБ) лежит десинхроноз, т.е. рассогласование нормальной ритмичности функционирования органов ЖКТ. Использование данного принципа повышает эффективность противоязвенной терапии на 10—