serotonergic neurotransmission system, which is most widely accepted principal action mechanism of antidepressants. “Semax” has already proven its efficacy in the treatment of cognitive impairment due to neuronal insults in clinical studies (Gusev EI, Skvortsova VI, Chukanova EI. (2005), indicating its potential effectiveness for elderly depressed patients who are frequently accompanied with comorbid neurological conditions such as stroke and cerebral infarction. Simultaneous administration of “Semax” and D-amphetamine resulted in a more profound increase in the locomotor activity of mice, pointing its modulation effect on dopaminergic systems that is involved in the formation of the psychostimulant effect (Eremin KO, Saransaari P, Oja S, Raevskii KS. (2004).

**Conclusions.** According to experimental data “Semax” may exert a key role in the treatment of depression considering its interaction with the pivotal neurotrophic factors and neurotransmitters.

**Kalantayevskiy S.S., Kavatsenko S.A.**

**AGE FEATURES PARAVASAL NERVES OF A LIVER**

Kharkiv National Medical University, Kharkiv, Ukraine

**Scientific advisor - Izmaylova L.V.**

**Background.** Laws of age features innervation of liver were established. In all age groups it has been proved, that the total of textures decreases from the beginning of formation of a texture in a direction to segments of liver. In a distal direction a decrease in percentage parameters of a content of fibres of average both thick diameters and an increase of content of thin ones occurs. During a newborn period there is a synchronal increase of total myelin fibres, thus, this process proceeds most intensively up to the end of age of the first childhood and reaches the maximal values to youthful age.

**Results.** We have noted asynchronicity in paces of a myelin fibres differentiation of thin, average and thick diameters at different levels of paravasal nerves of liver. The comparative analysis of paces of myelin fibres differentiation of various diameter in paravasal nerves focused around of the general hepatic artery has shown that myelin fibres of thin diameter for the first time have come to light in one age group – in embryos of eight months.

**Kalinovic F.**

**CONTEMPORARY VIEWS OF FEMUR REMODELING**

University in Nis, Serbia

**Introduction.** Femur injuries appear on a relatively frequent basis. Injuries of proximal end of the femur are very significant and most frequently occur, which is why they have been thoroughly studied. However, injuries of distal end of the femur can be very interesting as well although they have not been studied in detail. Modern surgery and orthopaedics have made a significant advancement in the recent years so that most injuries are efficiently and quickly healed. However, some more serious