トピックス
酸化ストレスにより赤血球におこる機能的および分子細胞学的変化—分子レオロジーへのプロローグー
鈴木 洋司,満田 憲昭
愛媛大学大学院生理学分野

乳児白血病の病態と発症機序
石井 榮一
愛媛大学大学院小児医学分野

原著
生後ラット歯状回におけるプロサポシンの変化
森下 緑1),濱田 文彦1)*,下川 哲哉1),鍋加 浩明1),宮脇 恭史1),2),松田 正司1)
1)愛媛大学大学院解剖学・発生学分野 2)四国中央医療福祉総合学院 * コレスポンディングオーサー

Summary
Neurogenesis in the adult dentate gyrus (DG) of the hippocampus occurs constitutively throughout postnatal life. This adult neurogenesis includes the multi-step process (proliferation, differentiation, migration, targeting, and synaptic integration) that ends with the formation of a postmitotic functionally integrated new neuron. During this adult neurogenesis, various markers such as GFAP, nestin, Pax6, PSA-NCAM, NeuN, Doublecortin, TUC-4, Tuj-1, calretinin are expressed.

Prosaposin is the precursor of saposins A, B, C, and D, and is proved in various organs or excretions. Strong expression of prosaposin has been demonstrated in the developing brain, and neurotrophic activity of prosaposin is proposed.

This study investigated the changes in prosaposin in the DG of the young and adult rats using double immunohistochemistry with antibodies to prosaposin, PSA-NCAM, and NeuN. In the DG at 3 or 7 days after birth, prosaposin-immunoreactivities were intense, but decreased gradually after 14 days. In the DG at 1 and 2 months after birth, immature PSA-NCAM positive neurons observed exclusively in the subgranular-zone were prosaposin negative, but mature Neu-N positive neurons were prosaposin positive. These results imply the diverse neurotrophic functions of prosaposin in the neurogenesis in both young and adult animals.

Key Words : prosaposin, dentate gyrus, neurogenesis

糖尿病患者における勃起障害(ED:erectile dysfunction)の実態調査
吉田 直彦1),古川 慎哉2),上田 晃久2),新谷 哲司3),山下 治彦1),宮岡 弘明4)
1)吉田病院 2)愛媛大学大学院先端病態制御内科学分野 3)松山市民病院 4)済生会松山病院甲状腺糖尿病センター

Summary
Background and aims: The Quality of Life (QOL) of people with diabetes mellitus was lower than the healthy subjects. Erectile Dysfunction (ED) is a common complication of diabetes. We evaluated the prevalence of ED, interest in ED treatment among men living with diabetes in Ehime prefecture.

Material and Methods: We made the questionnaire about ED, lifestyle and ED treatment. We gave the questionnaire to 75 patients with diabetes mellitus from April 2008 to June 2008 in 3 hospitals in Ehime prefecture.

Results: The mean age was 65.4 years (39-82) and the mean HbA1c was 6.83%. The prevalence of ED in patients with diabetes was 60%. ED was directly associated with age. Of the diabetes patients with ED, only 9 (20%) had used PDE5 inhibitors. However, half of them had taken PDE5 inhibitors without a prescription. ED patients desired ED treatment (28%) or would consider treatment (48%). Conclusion: Our study indicates that ED is a very serious problem and a complication among people with diabetes mellitus. Then, we must provide an environment in which patients can comfortably consult with their doctor about ED.

Key Words: diabetes mellitus, erectile dysfunction, Quality of Life