IN BRIEF

CANCER

Decreased fertility among female childhood cancer survivors who received 22–27 Gy hypothalamic/pituitary irradiation: a report from the Childhood Cancer Survivor Study

Green, D. M. et al. Fertil. Steril. doi:10.1016/j.fertnstert.2011.02.002

3,619 female participants of the Childhood Cancer Survivor Study and 2,081 of their female siblings were asked to complete a questionnaire. Overall, women who were 5-year survivors of childhood cancer were as likely as their siblings to report a pregnancy. However, those who had received radiation doses \geq 22 Gy to treat hypothalamic or pituitary cancer had a decreased chance of pregnancy compared with the cancer survivors who had not received radiation therapy.

METABOLISM

Phosphate incorporation during glycogen synthesis and Lafora disease

Tagliabracci, V. S. et al. Cell Metab. 13, 274-282 (2011)

Glycogen synthase can incorporate β -phosphate from its substrate (UDP-glucose) at a rate of one per 10,000 glucose molecules, which could be a catalytic error. Lafora disease, a fatal progressive myoclonus epilepsy, is caused by hyperphosphorylation of glycogen; therefore, removal of phosphate by laforin could be a repair or damage control mechanism.

CARDIOVASCULAR ENDOCRINOLOGY

Relationship between neck circumference and cardiometabolic parameters in HIV-infected and non-HIV-infected adults

Fitch, K. V. et al. Diabetes Care 34, 1026-1031 (2011)

In an analysis of 174 men and women with HIV and 154 without the infection, a large neck circumference was associated with reduced levels of HDL cholesterol and poor glucose homeostasis in both groups of patients. In those without HIV, neck circumference was also predictive of increased carotid intima—media thickness.

OBESITY

Differential miRNA expression in omental adipose tissue and in the circulation of obese patients identifies novel metabolic biomarkers

Heneghan, H. M. et al. J. Clin. Endocrinol. Metab. doi:10.1210/jc.2010-2701

The expression levels of microRNAs (miRNAs) in the omentum, subcutaneous fat and blood of 50 obese and nonobese patients were compared. Expression of miR-17-5p and miR-132 in the omentum fat of obese patients were different to the expression in nonobese patients. In those with obesity, the expression profiles in omental fat and blood correlated with BMI, fasting blood glucose and HbA_{1c} ; therefore, miRNAs could be used as biomarkers for the metabolic syndrome.