

REVIEW ARTICLE

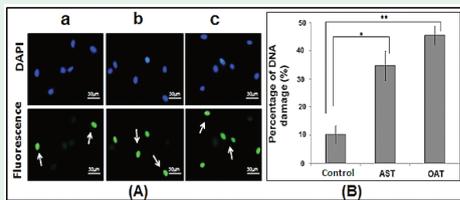
The management of prehypertension in young adults

Jun & Yali review summarized the epidemiological characteristics, disease intervention measures, and disease progression characteristics of prehypertension to provide a basis for the development of targeted intervention measures for young adults with prehypertension. The incidence of prehypertension (blood pressure 120-139 and/or 80-89 mm Hg) in young adults worldwide ranges from ~37.5% to 77.1%. Identifying high-risk groups of prehypertension in young adults is helpful for early and effective interventions and treatments to reduce the occurrence of future hypertension and organ damage.

see page 223

ORIGINAL ARTICLES

Effect of seminal redox status on lipid peroxidation, apoptosis and DNA fragmentation in spermatozoa of infertile Saudi males

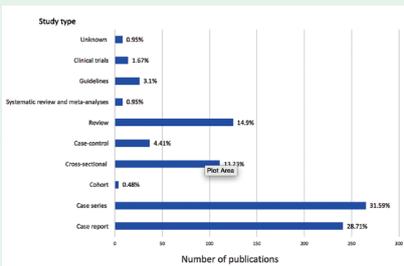


DNA fragmentation in human sperm as determined by TUNEL assay. A) Fluorescence microscopy images of sperm derived from men in (a) the fertile normozoospermic group (control), (b) asthenozoospermic (AST) group, and (c) oligoasthenotatozoospermic (OAT) group. White arrows indicate TUNEL-positive nuclei (bright green), while DAPI (blue) staining indicates the total number of nuclei (scale bar: 50 μ m). B) Quantitative determination (percentage of apoptotic cells versus the total number of cells) of DNA fragmentation in sperm of males in the control, AST, and OAT groups. A greater number of TUNEL-positive nuclei were observed in the OAT and AST groups than in the control group

Fatima et al assess the effect of seminal redox status on lipid peroxidation (LPO), apoptosis and integrity of sperm DNA in infertile males. Significantly ($p < 0.001$) increased seminal ROS level with decreased TAS scores was observed in the infertile groups compared to normozoospermics. The infertile males showed marked elevated ($p < 0.001$) levels of 4-HNE, DNA fragmentation and caspase-3 activity compared to normozoospermics, which was positively correlated to increased seminal ROS levels and negatively to the TAS score in the studied groups. Seminal ROS level was significantly inverse correlated to the semen parameters. Additionally, a strong negative correlation between DNA fragmentation, LPO, caspase-3 activity and seminal parameters were observed.

see page 238

Oncology research in Saudi Arabia over a 10-year period. A synopsis



Types of Saudi oncology studies, 2008-2017

Alghamdi et al conclude that despite an increase in the number of Saudi publications in the field of oncology over time, the level of evidence (LOE) did not change. There were, however, some improvements in the international collaboration and journal impact factor, as well as an increase in the number of studies published in international journals. These observations call for a national strategy to improve oncology research in Saudi Arabia. A total of 839 publications met the inclusion criteria. The most common type of research was case series, totaling 32% of all publications. Clinical trials <2% of the total. The LOE was I, II, III, and IV in 0.3%, 2.1%, 58.4%, and 39.3% of the included publications, respectively. The LOE was the same in the 2 periods. There were more publications in international journals ($p = 0.004$), more international collaborations ($p = 0.001$), and higher journal impact factors ($p = 0.037$) in 2013-2017 than in 2008-2012.

see page 261

CASE REPORT

Idiopathic chylopericardium. A case report from Saudi Arabia



A chest radiograph revealing an enlarged cardiac silhouette, a pericardial drain is noted in place. The lungs appear unremarkable apart from left basal atelectasis

Kawthar presents a 33-year-old woman who was previously healthy was referred to our medical institute for evaluation of cardiomegaly that had been detected in a routine, pre-employment chest radiograph. The patient had no cough, sputum, dyspnea, chest pain, or swelling of the lower limbs. She had no fever, no rheumatological conditions, and no past history of tuberculosis, brucellosis, malignancy, or trauma. She was a nonsmoker. The author conclude that primary chylopericardium is a rare condition. In countries where tuberculosis is an endemic disease, patients with pericardial effusion are sometimes treated empirically with anti-tuberculosis antibiotics on a trial basis if no other cause for effusion is confirmed.

see page 304