

## Selected Abstracts of Articles Published Elsewhere by Authors in Kuwait

Kuwait Medical Journal 2005, 37 (4): 304-306

### Age-specific Reference Levels of Serum Prostate-Specific Antigen and Prostate Volume in Healthy Arab Men

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**Objective:** To determine age-specific reference ranges for serum prostate-specific antigen (PSA) concentration and prostate volumes in a population of healthy Arab men.

**Subjects And Methods:** Blood samples were taken from 396 healthy Arab men (from Kuwait and Oman) aged 15-79 years and from across the social spectrum. Men aged >40 years had a digital rectal examination and transrectal ultrasonography of the prostate to determine prostate volume. The serum PSA level was measured using commercial kits, and age-specific ranges for PSA levels and prostate volume determined.

**Results:** The serum PSA ranges (ng/mL) for each age range in Arab men were: 40-49 years, 0-0.9; 60-69, 0-2.7; 70-79, 0-5.5 ng/mL; the respective prostate volumes were 8-22, 9-30 and 10-33 mL. The serum PSA level and prostate volume correlated with age ( $P < 0.001$ ). Arab men had lower serum PSA levels and prostate volumes than those reported for Caucasians, but similar to those reported for Asians (Japanese and Chinese).

**Conclusion:** These results indicate that Arab men have lower PSA levels and prostate volumes than Caucasians. The levels are slightly lower than those reported in the Japanese and, as in the Japanese, low PSA levels and small prostate volumes might be related to the low incidence of clinical prostate cancer in Arab men.

### Self-Reported Oral Health, Oral Hygiene Habits, and Dental Attendance of Pregnant Women in Kuwait

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**J Clin Periodontol 2005; 32:809-814**

**Objectives:** The aim of this study was to describe self-reported oral health, oral Hygiene Habits, And Frequency Of Visits To A Dentist Among Pregnant Women In Kuwait.

**Material And Methods:** A cross-sectional study with an anonymous structured questionnaire was distributed among 650 pregnant women during May-June 2003, when they were admitted to the maternity ward at the largest government maternity hospital in Kuwait City. The response rate was 93% (n=603).

**Results:** Every fourth respondent was in her first pregnancy, while 36% already had three or more children. Every fifth woman felt that her oral health was poor, and one-third of the women believed that they had periodontal problems currently. About two-thirds of the women were brushing more than once a day and almost all (94%) at least once a day. Over the previous 6 months, 40% had experienced dental pain. Half of the women had visited a dentist during pregnancy, mostly for dental pain. Most of the women had received no instructions concerning oral health care during their pregnancy.

**Conclusions:** A large proportion of the pregnant women in this study had oral health problems; however, half of the women had not seen a dentist during their pregnancy.

## Epidemiology of Multiple Sclerosis in Kuwait: New Trends in Incidence and Prevalence

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The epidemiology of multiple sclerosis (MS) is undergoing dramatic changes; MS is occurring with increased frequency in many parts of the world. In this retrospective study, we examined the changes in incidence and prevalence of MS in Kuwait in the period between 1993 and 2000. We analyzed the records of patients with clinically defined and laboratory supported MS. The total incidence rate increased from 1.05/100,000 population in 1993 to 2.62/100,000 in 2000. The increased incidence of MS was most pronounced among Kuwaiti women (from 2.26/100,000 in 1993 to 7.79/100,000 in 2000). The total prevalence rate increased from 6.68/100,000 in 1993 to 14.77/100,000 in 2000. It was much higher for Kuwaitis (31.15/100,000), as compared to non-Kuwaitis (5.55/100,000), in a complete reversal of the pattern observed before 1990. The prevalence was also higher among Kuwaiti women (35.54/100,000), as compared with Kuwaiti men (26.65/100,000). In conclusion, the incidence and prevalence of MS in Kuwait has increased between the early and late 1990s with no signs of leveling off. In a geographic area that was previously associated with low prevalence, local environmental factors may be responsible for these dramatic changes.

## Subjective Quality of Life of Community Living Sudanese Psychiatric Patients: Comparison with Family Caregivers' Impressions and Control Group

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**Qual Life Res 2005; 14:1855-1867**

**Background:** Researchers have paid scant attention to comparative studies of quality of life (QOL) issues among psychiatric diagnostic groups; the studies of patient - caregiver concordance ratings had small sample sizes; and the reports are rare from the African and Arab worlds.

**Objectives:** To assess the subjective QOL of stable Sudanese outpatients, using the WHOQOL - Bref, compared with a general population sample; examine the caregiver-patient concordance; and assess the variables that impact on domains of QOL.

**Method:** The responses of outpatients with schizophrenia (99), major affective disorders (120) and neuroses (81) (mean age 33.8) were compared with 211 controls and the impression of their family caregivers.

**Results:** Patients were dissatisfied with life circumstances; the schizophrenia group and those with co-morbidity had significantly lower QOL scores; while the control group had higher QOL scores. There was no significant impact on QOL domains, of socio-demographic factors, duration of illness and treatment side effects. The schizophrenia group had least concordance with caregivers, but eight items were judged to be satisfactorily concordant for all groups.

**Conclusions:** Psychiatric patients in stable condition can make reliable judgments of QOL, with relatives providing additional information. Differences in QOL and concordance of ratings reflect disease severity.

## Severe Emphysematous Pyelonephritis in Diabetic Patients: Diagnosis and Aspects of Surgical Management

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**Urol Int 2005; 75:123-128**

**Purpose:** Emphysematous pyelonephritis (EPN) is a rare, severe gas-forming infection of renal parenchyma and surrounding tissues seen mostly in diabetic patients. Diagnosis and adequate

therapeutic regimen are controversial. We reviewed the clinical presentation, diagnosis and aspects of surgical management of patients presenting with severe EPN.

**Patients And Methods:** Patients with EPN managed in our unit between 1996 and 2004 were reviewed. Diagnosis was confirmed by CT scan appearance of gas in the renal or perirenal area in a very ill patient. We compared the outcome of immediate nephrectomy with drainage of perinephric abscesses in patients presenting with severe EPN.

**Results:** Seven patients were managed in our unit during the 8-year period. All patients were diabetic and women outnumbered men (6:1). Renogram in all 7 patients showed renal function of affected kidney to be less than 15% in 6 patients. *Escherichia coli* was isolated in all patients from either urine, blood or perinephric pus. Management consisted of intensive resuscitation, control of blood glucose and use of intravenous antibiotics. Emergency nephrectomy was performed in 3 patients, delayed nephrectomy after an initial period of percutaneous drainage in 2 patients, incision and drainage in one patient and immediate percutaneous drainage was performed in one patient. One patient died 5 days post-nephrectomy of myocardial infarction. Patients who had immediate nephrectomy recovered quicker (18-21 days) and had no postoperative complications. Patients who had incision and drainage, or percutaneous drainage presented with recurrent discharging sinuses or perinephric abscesses requiring further surgical interventions and spent longer time in hospital (28-37 days).

**Conclusion:** Patients with severe EPN often present in extremis and require intensive medical treatment. The diagnosis must be entertained in diabetic women presenting with flank pain and septicemia. The function of the affected kidney is often very poor and early nephrectomy offers the best outcome. Percutaneous drainage or incision and drainage of the abscess may be performed in patients too ill for immediate formal nephrectomy.

## Morphological Responses of the Rabbit Testis to Ischemic/Reperfusion Injury Due to Torsion

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**Urol Int 2005; 75:258-263**

**Objective:** To investigate the morphological effects of free radical injury on spermatogenic cells in both testes of the rabbit experimental model of testicular torsion.

**Materials And Methods:** The left testes of 8 peripubertal NZW rabbits (3-6 months) were subjected to 0, 15, 30, 60, 90, 120, and 180 min of ischemia by applying a clamp to the spermatic cord, followed by reperfusion. Another set of 8 rabbits was subjected to 60 min of ischemia and administered antioxidants (acetylsalicylic acid, ascorbic acid, allopurinol, quercetin, superoxide dismutase) before reperfusion. Both testes of 4 animals per group were harvested at 24 h and the remaining 4 at 3 months. Johnsen scores for spermatogenic activity and other changes were assessed histologically and these were compared with testicular malondialdehyde (MDA), a measure of free radical damage, assayed on testicular homogenates using the thiobarbiturate method.

**Results:** In the 24-hour reperfusion group, apoptotic bodies and giant cells were more prominent in the seminiferous tubules of the left testes compared to the right, and were maximal after 90 min. In the 3-month reperfusion group, giant cells were absent, and apoptotic bodies were reduced in both testes. Testicular MDA showed an increase only in the left testes in the 24-hour reperfusion group, while the 3-month group showed increased MDA levels in both testes, but more on the left. The Johnsen score fell only to 8.0 in the left testes in the 24-hour reperfusion group, but dropped to 2.3 in the 3-month reperfusion group. Only in the 3-month reperfusion group, did antioxidant-treated animals show a fall in Johnsen scores in the left testes, regardless of the type of antioxidant.

**Conclusion:** These findings confirm a role for reactive oxygen species (ROS) in damage to spermatogenic cells in both the ipsilateral and contralateral testes following torsion, with longer term effects in the torted testis. Currently available antioxidants do not provide any significant long-term protection against morphological damage to the testis by ROS generated in testicular torsion.