

## Selected Abstracts

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### **Toxic-Shock Syndrome; Epidemiologic Features. Recurrence, Risk Factors, and Prevention.**

**JEFFREY P. DAVIS, P. JOAN CHESNEY, PHILIP J. WAND and others. N. Engl. J. Med., 1980, 303 : 1429.**

TOXIC SHOCK SYNDROME was evaluated in 38 individuals, 37 of whom were women. All but two of the women had the disease develop during menstruation. All were caucasian. One patient died, 2.8 per cent. The diagnosis was made if these symptoms existed: fever above 38.9 degrees C., 102 degrees F.; documented hypotension or orthostatic dizziness; diffuse or palmar erythroderma followed by desquamation of the skin of the hands and feet; hyperemia of the conjunctivae or the mucous membranes of the oropharynx or vagina; and multisystem dysfunction, which must include at least four of the following: vomiting or diarrhea, alterations in consciousness, impaired kidney function, impaired hepatic function, thrombocytopenia, elevated muscle creatine phosphokinase, cardiopulmonary dysfunction and decreased, serum calcium and phosphate.

The disease is associated with staphylococci of phage group 1 that produce an epidermal toxin. The diagnosis was not made if other infectious causes were found. Recurrence rate of the disease was lower among those who had therapy with beta-lactamase-resistant penicillins. Thirty-five of the patients used tampons during the menstrual period accompanying the onset of the disease, but no single brand was associated with the disease in this study. Women less than 30 years of age appear to be at greater risk of toxic shock syndrome developing and in this study the over-all minimum risk appeared to be 6.7 instances per 100,000 menstruating women per year.

**-Arthur L. Herbst..**

### **Toxic Shock Syndrome in Menstruating Women. Ray.F. FISHER, HEWITT C.**

**GOODPASTURE, JERRY D. PETERIE and DOUGLAS W. VOTH. Ann. Intern. Med., 1981, 94: 156.**

FROM JANUARY 1977 to January 1980 eight women between the ages of 18 and 36 years had toxic febrile illnesses characterized by: abrupt onset associated with vomiting or watery diarrhea, or both; a drop in the systolic blood pressure to 80 mm./ Hg or less within 48 hours; diffuse nonpapular blanching erythema of the skin or mucous membranes followed in the second week by desquamation, especially of the palms of the hands and the soles of the feet and clinical and laboratory evidence excluding common febrile exanthema.

All of these patients had been healthy before the illness and none had ever had a similar episode. Seven of the patients used tampons and one used sanitary napkins. No single brand of tampon was common to all. All patients appeared toxic and had fever which persisted for two to seven days, and all patients presented with, or had hypotension develop within 48 hours of admission to the hospital. Erythema of the skin occurred in all patients and was generalized but most intense on the trunk, and often increased in the axillary and inguinal folds. Four patients had diffuse intravascular coagulation as evidenced by reduced platelets, decreased fibrinogen and increased fibrin split products and prothrombin time. Cervical secretions were cultured and in seven patients, staphylococcal aureus was present in all seven cultures. Cytomegalovirus was recovered from the cervical secretions and urine of one patient and from the urine only in another; however, convalescent sera demonstrated no rise in cytomegalovirus complement-fixation antibodies.

It was concluded that strains of staphylococcal aureus appeared to be etiologically significant in this illness. The 299 patients with toxic shock syndrome reported by the Center for Disease Control were discussed. Data from the Center for Disease Control suggested that continuous use of tampons may

increase the risk of this illness and that in 98 percent of the patients cultured in the Center for Disease Control study, staphylococcal aureus grew on cervical cultures. The incidence of this syndrome was estimated at 3 per 100,000 women.

**-C. Robert Stanhope.**

**Steroid, Secretion by the Postmenopausal Ovary. CHRISTOPHER LONGCOPE, RICHARD HUNTER and CFIARLENE FRANZ. Am. J. Obsret. Gynecol., 1980, 138: 564.**

FORTY-TWO postmenopausal women who underwent hysterectomy were studied to determine steroid production from their ovaries. Intraoperatively, samples were taken from the ovarian artery. A significant concentration gradient across the ovary was found for testosterone in one-half the women and for estradiol in less than one-half the women. For androstenedione, dehydroepiandrosterone and estrone there was insignificant ovarian secretion. There was no secretion of dehydroepiandrosterone sulfate.

The findings suggested a spectrum of ovarian function in postmenopausal women. As the study could not differentiate the secretory from the nonsecretory ovary by using any clinical grounds, all postmenopausal ovaries should be considered a potential source of estradiol and testosterone.

**-Max Chorwski.**

**Early Menopause and the Risk of Myocardial Infarction. LYNN ROSENBERG, CHARLES H. HENNEKENS, BERNARD ROSNER and others. Am. J. Obstet. Gynecol., 1981, 139 : 47.**

A SERIES of 121, 964 female nurses who responded to a questionnaire which was designed to evaluate the relationship between age at menopause and the risk of nonfatal myocardial infarction is discussed. Among 279 of these women, 123, 44 per cent, were postmenopausal at the time of hospitalization, compared with 1,859, 33 per cent, of 5,580 control patients who were matched by age who were not postmenopausal.

The relative risk of myocardial infarction increased with decreasing age at menopause among patients whose menopause was induced by bilateral oophorectomy. Those patients who underwent bilateral oophorectomy before age 35 had 7.2 times the risk of hospitalization for infarction when compared with that of premenopausal women. This risk compared with that of premenopausal women. This risk level was established at 95 percent confidence limits. In contrast, hysterectomy without bilateral salpingo-oophorectomy, hysterectomy without bilateral salpingo-oophorectomy was only associated with an increase in the risk of myocardial infarction. The effect was not related to the age at the time hysterectomy was performed.

**-Fred Duboe.**

**Pregnancy and Systemic Lupus Erythematosus. MARK T.HOUSER, ALFRED J. FISH, GEORGE E. TAGATZ and others. Am. J. Obstet. Gynecol., 1980, 138 : 409.**

THE EFFECTS OF pregnancy on patients with systemic lupus erythematosus as well as the effects of lupus on the outcome of pregnancy are evaluated. Of 11 patients evaluated, five had no evidence of active lupus or of active kidney disease at the onset of pregnancy, group a. Four of five patients in group a had two uncomplicated term pregnancies, each during the 13 years of the study. The one other patient in group a had two term deliveries complicated only by a superimposed mild pre-eclampsia. All ten neonates had Apgar scores of 7 or more at five minutes, had mean weights of 3,000 grams, ranging from 2,250 to 3,685 grams, and had benign neonatal courses.

Six patients had evidence of kidney disease or active lupus at the time of conception, or both, group b. Only one patient carried a pregnancy to term. The other five patients had seven pregnancies, each complicated by either: superimposed pre-eclampsia, onset of glomerulonephritis, premature delivery, elective abortion or spontaneous abortion. There were four infants born to this group with weights ranging from 1,540 grams to 2,850 grams. The mean weight was 2,320 grams. All had Apgar scores of

7 or more at five minutes; only one had respiratory distress syndrome develop. One infant had a congenital kidney anomaly.

Both group a and group b patients did well during the postpartum period. For example, all five patients who had deterioration of kidney function during pregnancy improved during this time. During the long term follow-up period, mean four years, there were no deaths, no development of a rapidly progressive course following pregnancy and no development of end-stage kidney failure.

**-Max Chorowski.**

**Short- Versus Long-Course Prophylactic Antibiotic treatment in Cesarean Section Patients. Larry J.D' ANGELO and ROBERT J.SOKOL. *Obster. Gynecol.*, 1980, 55 583.**

A WELL CONTROLLED study which involved 80 patients who were divided between short term and long term antibiotics that were given prophylactically at the time of cesarean section is presented. The drugs used initially were intravenously administered Kefzol, cefazolin and orally administered Keflex, cephalixin monohydrate. It was noted that these are not the same drugs. The exact doses of intravenously administered Kefzol, cefazolin, used in the long course of therapy was not stated and orally administered Keflex, cephalixin monohydrate, in both courses, was relatively short. In many patients, a decrease in endometritis was shown with the use of both short and long term antibiotics, as has been reported in other studies. It was concluded that it does not seem to matter what drug was used, but short term use is as efficient as long term use.

**-George D. Wilbanks.**

**Nephrolithotomy in Chronic Renal Failure; Saved from Dialysis. R. O'N. WITHEROW and J.E.A. WJCKHAM. *Br. J. Urol.*, 1980, 52 : 419.**

IN PATiENTS with severely decreased kidney function caused by stone disease, dialysis has been suggested as an alternative to operation. For this reason, 19 patients with a creatinine clearance of 20 ml./min. or less were studied. Eight patients had solitary kidneys and underwent previous nephrectomy for stone disease. Conservative kidney operation was undertaken in every patient. The usual surgical technique was pyelolithotomy with multiple paravascular dissection nephrotomies as necessary. Hypothermia as protection was used in 18 patients and inosine protection in one patient. Kidney ischemia time varied from 18 to 90 minutes with a mean of 61 minutes. Stone removal was complete in all patients except two. Stone analysis revealed one uric acid calculus, one cystine and the remainder magnesium, ammonium and phosphate.

Preoperatively, creatinine clearance ranged from 4 to 20 ml./min. with a mean of 12.9 ml./min. In the early postoperative period the clearances were often diminished, so much that dialysis was necessary on three occasions in two patients. Postoperative clearances ranged from 5 to 72 ml./min. with a mean of 25.4 ml./min. When these values were compared with those obtained before operation, there was a significant increase. Therefore, in patients with severely compromised kidney function caused by staghorn calculus, stone removal can result in significant improvement in creatinine clearance.

**-Ralph C. Benson, Jr.**

**Current Status of Classification and Staging of Prostate Cancer. GERALD P. MURPHY, J. F. GAETA, J.PICKREN and Z. WAJSMAN. *Cancer*, 1980 Suppl, 45 : 1889.**

ALTERATION S in international and American cLassifications of tumors occur as the evaluation of factors arise that are related to clinical and pathologic staging. Stage A carcinoma of the prostate is divided into A-1 and A-2, with the latter designation selected if more than 30 per cent of the tissue removed by transurethral resection is malignant. Modification of Stage B into the isolated nodule B-1 and the diffuse disease as B-2 as well as Stages C-1 and C-2 in the American system relate principally to an assessment of volume of disease.

Differences in the four systems of histologic grading have been partially resolved into evaluation is

considered in the light of possible hematogenous metastases. Although the curative value of lymphadenectomy is unknown once metastasis occurs, prognosis is poor regardless of the presence or absence of pelvic lymph node dissection. The true value of lymphangiography is unknown. The morbidity of lymphadenectomy cannot be ignored. The value of lymphadenectomy is in proportion to the adequacy of operation and the ability of the pathologist.

A variety of tests are undergoing evaluation such as fine needle aspiration of suspected metastases and percutaneous lymph node aspiration. Whole body computerized tomography can best be used to determine the appearance of the normal seminal vesicle angle. Ultrasound and biopsy of the bone marrow are less popular. Staging of carcinoma of the prostate varies and remains an individual decision.

**-Peter L. Scardino.**

**Immediate Exploration of the Unilateral Acute Scrotum in Young Male subjects. A. S. CASS, B. P. CASS and K. VEERARAGHAVAN. J. Urol., 1980, 124 : 829.**

ONE HUNDRED AND EIGHTY patients under 40 years of age who had immediate exploration for a unilateral acute scrotum over a ten year period were analyzed. Acute epididymitis was the diagnosis in 115 patients. Over 50 per cent of these patients had more than five white blood cells per high power field. Forty-nine patients had torsion of the testis. Only one of these patients was more than 30 years old. No patient with testicular torsion had white blood cells in the urine.

Exercise or sexual activity preceded the acute symptoms in 40 per cent of the patients. These physical forces can precipitate a cremasteric contraction which causes a rotation and holds the testicle in an abnormal position. The two congenital anomalies responsible for torsion of the testicle are a high investment of the tunica vaginalis, bell clapper deformity, or a long mesorchium with total or partial separation of the epididymis from the testicle. The immediate salvage rate of the testis with acute torsion was 90 per cent and long term follow-up examination was 73 per cent. The highest incidence of torsion of the testicular appendages was in patients who were 10 to 19 years old. The onset of pain was sudden in 85 per cent of these patients.

**-Frank B. Mahon, Jr.**