
Excerpts from Persian Medical Literature

The Effect of Seated Crossed-Leg Position on the Blood Pressure of Hypertensive Patients

One probable source of error of blood pressure (BP) measurement can be the crossed-leg seating position, but research findings on these subjects are contradictory. Therefore, the present study was designed to investigate the effect of crossing legs while measuring the BP in patients with hypertension.

The quasi-experimental study included 90 patients selected through purposive sampling among the population of patients with primary hypertension admitted to the Internal and Cardiac Clinics of Vase'ee Hospital in Sabzevar, Iran. BP was measured according to a written protocol in three steps: first sitting with both feet straight on the floor, then sitting with crossed legs, and finally sitting with both feet straight on the floor (as in the first step). Conventional stethoscope and sphygmomanometer were used for measurements, and *t*-test was used for data analysis in SPSS.

Crossing legs while measuring BP increased systolic BP by 6.81 mmHg (from 144.43±21.782 to 156.24±22.082) and diastolic BP by 3.12 mmHg (from 89.06±13.610 to 92.18±14.920). The mean systolic BP when the third step of the protocol was adopted reduced by 9.59 mmHg (from 156±22.082 to 146.66±22.438) and diastolic BP reduced by 3.53 mmHg (from 92.18±14.920 to 88.64±14.839).

Based on these findings, BP reading increases in the patients with hypertension when they take a seated crossed-leg position during BP measurement.

Authors: Khalil H, Faghih S, Behnam-Vashani H.

Source: *Journal of Sabzevar University of Medical Sciences*. 2008; **15 (3)**: 158 – 163.

The Effect of Microwave Radiation on Rabbit's Hearing

Regarding the rapid development in technology of mobile communication and increasing growth in the number of users, the radiation of these waves has become as one of the concerns of today's society. The aim of this study was to assess the potential changes in the auditory system of rabbit following exposure to microwave.

This was an experimental study carried out at two auditory centers of Tarbiat Modares University and Iran University of Medical Sciences in Tehran in 2005. White New Zealand male rabbits were the experimental animals used in our study and the auditory brainstem response (ABR) as the method to evaluate the possible changes following exposure to radiation. The latency time of the fifth wave of ABR was measured and recorded pre- and postexposure using two stimuli (click and tone burst) at different frequencies and two intensities of 70 and 100 dB.

The latency time of wave V was increased for different frequencies used in our experiment. An increase of more than 0.2 ms was noticed especially at two frequencies of 2000 and 8000 Hz. Statistical analysis of results was indicative of no significant change between latency times of wave V (ms) pre- and postexposure.

The results of audiometry provided evidences regarding the effect of microwave radiation at the levels produced by mobile phones on rabbit's auditory system.

Authors: Khavanin A, Najafi P, Pilehvarian AA, Asilian H, Akbary M, Ghods S.

Source: *The Journal of Qazvin University of Medical Sciences (JQUMS)*. 2008; **12 (3)**: 45 – 51.

Outcomes of Treatment for Sixth Nerve Palsy

The following study was carried out to compare the outcomes of surgical and nonsurgical treatment for sixth nerve palsy and paresis.

Hospital records of 33 patients (35 eyes) with sixth nerve dysfunction who were referred to Labbafinejad Medical Center in Tehran, Iran from September 1996 through September 2006 and underwent surgical procedures or botulinum toxin injection were reviewed.

The patients were divided into three groups: group A had muscle surgery without transposition; group B had transposition procedures; and group C had only botulinum toxin injection. The deviation improved from 50.3 ± 16.8 to 6 ± 9.8 prism diopter (PD) after the first operation and to 2.5 ± 5 PD after the second operation in group A; from 56.9 ± 24.3 to 5.5 ± 16 PD after the first operation and to almost zero following the second operation in group B; and from 44.3 ± 10.5 to 15 ± 20 PD six months following botulinum toxin injection. Head posture and limitations of motility also improved significantly in all three groups. The overall reoperation rate was 18.2%.

Various procedures are effective for sixth nerve dysfunction; all improve ocular deviation, head turn, and adductive capacity of the eye. In conclusion, the rate of reoperation is not high if the treatment is selected appropriately according to the patient's condition.

Authors: Bagheri A, Babsharif B, Abrishami M, Saloor H.

Source: *Scientific Journal of the Eye Bank of I.R. Iran.* 2009; **14 (2):** 125 – 129.

The Effect of Corticosteroids in Routine Treatment of Peritonsillar Abscess

There are controversies regarding the treatment of peritonsillar abscess as a common infection of head and neck, especially for administration of corticosteroids. According literature review, the use of corticosteroids in management of this abscess is increasing, but more controlled and comparative studies are needed. In this clinical trial, we evaluated the effect corticosteroids as an adjunct therapy for peritonsillar abscess.

This clinical trial was done on 50 hospitalized patients who were divided into two groups; steroid group and placebo group. Antibiotic therapy and method of abscess drainage were the same in both groups. A special questionnaire included characteristics, symptoms, clinical course, and complications of the patients. The data were analyzed by SPSS software using Chi-square, repeated measurement, and *t*-test.

Normalization of body temperature within 12 hours after treatment and the mean time of painless swallowing were 100% and nine hours in the steroid group. Hospitalization period was three and four days in steroid and placebo groups, respectively (*P* value>0.05). Fewer complications were reported in the steroid receiving patients. There was one case of relapse in the steroid group and five cases in the placebo group (*P* value=0.09).

According to our findings, it seems that corticosteroid adjuvant therapy of peritonsillar abscess is effective and doesn't lead to any important complication.

Authors: Mirvakili SA, Owlia MB, Atighechi S, Allaf-Akbari S.

Source: *Journal of Shaheed Sadoughi University of Medical Sciences.* 2009; **16 (4):** 3 – 9.