
Excerpts from Persian Medical Literature

Intelligence Quotient in Patients with Congenital Strabismus

The purpose of this study was to evaluate intelligence quotient (IQ) in patients with congenital strabismus scheduled for surgery at Labbafinejad Medical Center in Tehran.

All patients with congenital strabismus scheduled for surgery were enrolled consecutively over a one year period in a cross-sectional study. Patients were evaluated for verbal, performance, and total IQ and compared with the normal population whose mean IQ was 100 ± 15 .

During the study period, 109 patients with a mean age of 18.4 ± 10.5 years (range: 4 – 63 years) were included. Educational status of the majority of patients (80%) was less than a high-school diploma. Most patients (79.8%) lived in urban areas, and 46 patients (42.2%) had some degree of unilateral or bilateral amblyopia. Mean verbal IQ was 87.2 ± 19.6 (range 45 – 127), performance IQ was 81 ± 15.5 (range 44 – 111) and total IQ was 83.5 ± 18.3 (range 40 – 120). Total IQ was lower in comparison with the normal population ($P < 0.01$) and was significantly higher in urban residents as compared to rural residents (85.1 ± 19.5 vs. 77.3 ± 10.8 , $P = 0.016$). Patients with coexisting amblyopia whose parents were not educated had lower IQ levels. Total IQ was higher in myopes than emmetropes, of which both exhibited higher IQ levels than hyperopes. IQ levels were better with vertical deviations and higher in ETs than XTs, however these comparisons were not statistically significant ($P > 0.05$).

Patients with congenital strabismus assessed in this study had lower mean IQ levels than the normal population. The reasons may be genetically related or resulting from acquired causes secondary to strabismus.

Authors: Bagheri A, Falahi MR, Abrishami M, Saloor H, Aletaha M, Tamanaie-Fard S, et al.

Source: *Scientific Journal of the Eye Bank of I.R. Iran.* 2009; **14 (4):** 345 – 353.

Laparoscopic Adrenalectomy for Pheochromocytoma

With advances in video endoscopic technology and the widespread use of laparoscopy in abdominal surgery, the success rate for adrenal gland removal has increased. In this study, which was our first experience utilizing laparoscopic adrenalectomy for the treatment of pheochromocytoma, we attempted to report treatment outcomes of laparoscopic adrenalectomy.

This study was a case-series assessment. Among the patients who underwent surgical removal of an adrenal mass, 11 cases diagnosed with pheochromocytoma were treated laparoscopically. There were six males and five females with a mean age of 36 ± 13 (14 – 55) years included in this study. In five cases, the mass was located in the right adrenal and the left adrenal in six cases. The mean mass size was 3.8 ± 0.72 (2.8 – 4.8) cm. All patients received a blocker prior to surgery. The laparoscopic adrenalectomy was performed by a transabdominal approach.

In our study, 11 successful laparoscopic adrenalectomies were performed with no conversion to open surgery. Intraoperative cardiovascular instability was found in five patients who exhibited severe symptoms prior to surgery. The mean cardiovascular instability was 1.09 ± 1.5 (0 – 3; systolic blood pressure > 200 mmHg and heart rate > 120 bpm). Most cardiac changes were controlled after the adrenal veins were ligated. Intraoperative bleeding during laparoscopy was not significant. Mean operative time was 161 ± 22.7 (120 – 195) minutes. There was no correlation between operative time and tumor size. A postoperative complication, pneumothorax, was seen in only one patient following surgery. All patients with hypertension recovered after surgery.

Laparoscopic adrenalectomy is a safe and effective procedure. It could be an alternative approach for open surgery in selected patients.

Authors: Barband AR, Gholip C.

Source: *Medical Journal of Tabriz University of Medical Sciences*. 2009; **31 (1)**: 25 – 30.

Comparison of Urine and Milk Iodine Concentration among Congenitally Hypothyroid Neonates and their Mothers and a Control Group

Although Iran is known as an iodine sufficient area, congenital hypothyroidism (CH) is prevalent. Because iodine excess can contribute to hypothyroidism, we evaluated the role of iodine excess and ID in the etiology of CH.

In a cross-sectional study, UIC (urine iodine concentration) in newborns with CH as well as UIC and MIC (milk iodine concentration) of their mothers were compared with a control group. After acid digestion of urine samples and milk samples, iodine concentrations were determined by the Sandell-Kolthoff method. Chi-square, Wilcoxon, and Pearson correlation tests were used for statistical analysis. A *P* value less than 0.05 was considered statistically significant.

The median MIC between CH (n=68) and healthy subjects (n=179) was statistically different (210 vs. 170 µg/L, respectively; *P*<0.05). However the median UIC amongst neonates and mother's of CH when compared with healthy subjects was not statistically different (305 vs. 300 µg/L; 150 vs.130 µg/L, respectively; *P*>0.05). There were 71.2% and 46.7% of mothers of hypothyroid and healthy subjects who had MICs greater than 180 µg/L (iodine excess), respectively (*P*=0.002).

Based on the higher levels of MIC in mothers of CH neonates, iodine excess could be a possible risk factor for CH. However, since the comparison of UIC between the control and neonate groups showed no differences, further investigations are needed to facilitate a deeper insight into and clarification of the etiology of CH.

Authors: Nasri P, Hashemipour M, Hovsepian S, Amini M, Heidari K, Sajjadi SA, et al.

Source: *Iranian Journal of Endocrinology and Metabolism*. 2008; **11 (3)**: 265 – 272.

The Effect of EMLA on the Patient's Comfort during Subgingival Scaling Removal

Usually, patients with dental problems avoid subgingival scaling due to its pain and unpleasant sensation. During this procedure, patients cannot usually relax and occasionally move which, due to the high demand of precision for this type of scaling, complicates treatment and may lead to treatment failure. Currently, local anesthetics are used to reduce both pain and patient apprehension. One such anesthetic is an eutectic mixture of lidocaine and prilocaine (EMLA). This paper reports the formulation of EMLA and evaluates its effect on patients' comfort during subgingival scaling in a double blind clinical trial.

There were 30 patients with moderate to severe periodontitis selected for this study by simple non-random sampling from those referred to Shaheed Beheshti Faculty of Dentistry in Tehran. The patients were between 15 to 55 years of age. The use of EMLA was effective in decreasing pain during subgingival scaling removal.

Authors: Hojattipour M.

Source: *Medical Social Security Journal*. 2009; **8**: 191 – 196.
