ICCN Poster Presentations

Clinical nutrition: diagnosis and management

The relationship between maternal anthropometric measurement and birth weight

F Mortazavi* and T Khadiv Zadeh

Sabzevar Faculty of Medical Science, Sabzevar, Iran

Introduction: Birth weight is believed to be directly related to maternal nutritional status. In developing countries, monitoring gestational weight gain involves considerable difficulties due to poor health services. Moreover, there is lack of information about pre-pregnancy. Weight under these circumstances, screening with measurement that require only one contact with the mother, such as weight for height and mid upper arm circumference, can be a very helpful and efficient means of assessing maternal nutritional status. The purpose of the present study is too examine the relationship between maternal W.F.H and M.U.A.C with birth weight.

Material and methods: A sample of 226 healthy pregnant mothers was selected. Weight, height, MUAC and other anthropometric measurements were taken before delivery. Infant birth weights were taken before delivery. Weights for height of mothers were calculated by using Haick's formula.

Results: The results indicate that there is a strong relationship between birth weight and maternal WFH (P<0.007) and also between MUAC and birth weight (P<0.0003). Mothers who attained 120% of IBW at term delivered baby's with higher birth weight (P<0.0001). Mothers with MUAC lower than 23.2cm delivered baby's with lower birth weight (P<0.002).

Conclusion: The forgoing results confirm the usefulness of WFH and MUAC as an indicators of maternal nutritional status and predictors of birth weight. We also conclude that nutritional intervention aiming at the attainment of 120% of WFH by pregnant mothers can significantly lower the risk of insufficient birth weight.

Prevalence of general and central obesity in diabetic patients referring to the diabetic clinic of Zahedan, Iran

Z Mortazavi* and F Rakhshani

School of Health, Zahedan University of Medical Sciences, Zahedan, Sistan & Baloochestan, Iran

Aims: obesity is a growing public health problem worldwide. It is considered as the most important risk factor for type2 diabetes. Central obesity carries a particularly high risk. We sought to estimate the prevalence of overweight, obesity, and central obesity in type 2 diabetic patients referring to the diabetic clinic of zahedan.

Methodology and results: a random sample of 384 subjects (222 women, 162 men) was studied. Age, sex, family history of diabetes, and physical activity were obtained, height, weight, waist and hip circumferences were measured. Body mass index (bmi) was used as indicator of obesity, and the waist to hip ratio (whr) was used as an indicator of central obesity. The prevalence of overweight, obesity, and central obesity were 44.6 %, 36.5%, 100% (women) and 50.6%, 7.4%, 25.3% (men).

Conclusion: the prevalence of general and central obesity in subjects is high. Patients must be aware of risk of associated disease and encourage to adopt a healthy lifestyle. Treatment of obesity is an important therapeutic goal in the management of patients with type2 diabetes mellitus.