

# SELECTED ABSTRACTS FROM NATIONAL MEDICAL JOURNALS

Pages with reference to book, From 209 To 210

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## **SILVER FOIL AND COUNTERFEITS - USE IN MEDICINE EATABLES. Khan, S.A., 'Adil, A.S., Saddal, A.A. Pakistan J. Med. Res., 1983; 22:69-72.**

Decoration of eatables with silver leaf or foils is a usual custom in the Indo-Paldstan sub-continent. It makes the items look attractive and there is a general belief that silver invigorates the human body. As the purity of these silver foils was doubted in the local press, a study was undertaken to analyse a large number of samples from a variety of eatables being sold in the market.

Sample solutions were prepared by dissolving 1-2g of the foil in 20 ml concentrated nitric acid. This was then diluted with 50 ml water and boiled for 5 minutes and then transferred to 250 ml measuring flasks to make up the volume with water. Determination of silver was done by the thiocyanate method and of lead by the Di-thiozone method. Alimunium was detected by EDTA.

The analysis revealed that silver foils decorating chewing tobacco, sweets and areca nuts all contained 100 percent alumunium with traces of lead in some specimens. Medicinal tonic preparations showed 100 percent alumunium with traces of silver.

In the indigenous system of medicine finely divided silver is administered orally to act as a tonic. This practice has been used by Hakims. Common people have been using silver foil to decorate foods on ceremonious occasions. As silver is costly so these so-called silver foils have been found to be practically devoid of silver and made up of alumunium and sometimes also contaminated with lead, which is a hazardous situation.

In medical treatment silver is used in solutions, suspensions and ointments for local application externally and in dental surgery for fillings. Alumunium utensils because of their low cost are used widely for food preparation though they are not good for storage and dissolution of the metal does take place. This itself is bad for health and if along with it alumunium is taken in the form of foils it can be a grave danger. Lead toxicity has been well established. It involves the gastro-intestinal tract and nervous system and can lead to optic neuritis and blindness. It is therefore strongly recommended that silver foils decorating of eatables being made up of alumunium and lead should be totally discarded.

## **HBeAg, ANTI-HBe IN HBs AG POSITIVE BLOOD DONORS IN RAWALPINDI/ISLAM-ABAD. Kazmi, K., Burney, Mi., Ghafoor. A. Pakistan J Med. Res 1983 ;22: 63-64.**

Blood specimens from donors of the Armed Forces Institute of Blood Transfusion, Rawalpindi were tested for HBsAg and HBeAg. The 'e' antigen was first identified by Magnus and Spmark in 1972 in the serum of patients with type B Hepatitis. HBeAg and Anti-HBe are found in the serum of patients with chronic hepatitis. HBeAg is presumed to be an antigenic component of the Dane particle or a soluble protein released in response to HBV. Thus donors having a positive HBeAg and HBsAg are considered infectious and can cause HBV infection to the recipient.

HBsAg was detected by, testing the collected sera with HA kits from Wellcome. 8 percent of the donors were found positive for HBsAg. These were again subjected to the HBeAg and anti HBe test through Rheophoresis plates from Abbott Laboratories. 25 percent of the HBsAg positive cases were found to contain HBeAg and 60 percent were positive for Anti HBeAg.

Since HBeAg positive blood is infectious so 2 percent of the HBsAg positive donors would infect the recipients with HBV if this blood would be transfused.

## **GLUCOSE - 6 - PHOSPHATE DEHYDROGENASE DEFICIENCY IN THE LAHORE AREA. Bollinger, R.C., Latif, AZ. Pakistan J. Med. Res., 1985;24: 85-87.**

Evaluation of glucose-6-phosphate dehydrogenase deficiency in inhabitants of villages near Lahore,

was done. Individuals deficient in G6PD develop haemolysis when given potentially oxidising drugs as primaquin, which is used commonly as chemotherapy in malaria especially *P. Vivax*.

473 male and 307 female volunteers were screened. They also included medical students and staff members of ICMRT. 100 Microliter of finger prick blood was collected into heparinized capillary tubes and stored on ice for 2-6 hours. The Sigma Test Kit 400 was used for G6PD determination and the reactions were described as normal, intermediate or deficient. There were 12 deficient males and 4 deficient females having haematocrit values of 42.0% and 39.7% respectively. The intermediate reactors comprised of 14 males and 17 females.

The incidence of G6PD deficiency would be considered low with the obtained values. Over 250 G6PD isoenzymes have been isolated having varying susceptibility to haemolysis by primaquin. A study to identify the variants and isoenzymes and their sensitivity to drug induced haemolysis will influence recommendations for the use of primaquin in the Pakistani population.

**LIPID PATTERN IN Shahid, A., Zuberi, S.J.. J. Med. Res., 1985;24:33-37.**

Serum lipids were determined in 96 healthy subjects of both sexes and of ages between 20 and 50 years. Blood samples were drawn after an overnight fast and analysis was done for total lipids (Kunkel), Cholesterol (Ferro and Hans), triglycerides (Bio-merieux), phospholipids (Youngberg) and low density lipoprotein (B.D.H. kit).

Majority of the subjects had lipid values between 400 and 800 mg%. Serum cholesterol levels ranged between 125-275 mg% and 10 HEALTHY SUBJECTS.

Husnain, S.N. Pakistan percent of the subjects had hypercholesterolaemia. Serum triglycerides values were between 60-180 mg% and 16.6 percent of the individuals had hypertriglyceridaemia. Serum phospholipids were found to lie between 62 and 300 mg % whereas serum low density lipoproteins ranged between 250 and 650 mg% and 8 percent of the individuals had hyperlipoproteinaemia.

This study indicated that in males there was a progressive elevation in the serum levels of total lipids, triglycerides and phospholipids reaching maximum values in the age group of 50 years and above.

Serum cholesterol and low density lipoproteins levels had a peak elevation in the range of 40 to 49 years. In females the levels of total lipids, cholesterol and triglycerides were maximally raised in the age group 40 to 49 years; whereas phospholipids and low density lipoproteins had peak levels in the age group of 50 years and above.

The analysis thus revealed that males had increased levels of serum total lipids and triglycerides than females in all age groups, whereas serum cholesterol in the older age group showed a female dominance. Serum low density lipoproteins were found to be lower in females in all ages and this especially in the reproductive span can be attributed to a controlling effect of the sex hormones. It also thus indicates that males are more prone to coronary disease at an earlier age. Prevention of hyperlipaemia should be stressed through consumption of unsaturated fat in diet.