ABSTRACT

Levels of Amylase, Lipase and Creatine Phosphokinase CPK in serum of cancer patients were analysed. Blood samples of 152 different cancer patients including Carcinoma Breast, Prostrate, Ovary, Cervix, Lungs, Stomach, Colon, Esophagus and Blood cancer (NHL, HD, Osteogenic sarcoma, Burkits lymphoma, Ewing's sarcoma, Mental Cell Lymphoma, Plasmacytoma), Testis, Tongue, Brain Tumor, Larynx, Urinary Bladder, Rectum, Cheek, Kidney, Renal cell carcinoma (RCC), Oral cavity, Leg and Bronchus were taken. Percentages of Amylase, Lipase and CPK activities were determined in cancer patients and also in controlled group. Distribution of amylase, lipase and CPK in normal and high levels in different types of cancer patients was determined. Out of 152 cases in 114 cases (75%) amylase was normal and in 38 cases (25%) it was high. Moreover, out of 152 cases in 134 cases (88%) lipase was normal and in 18 cases (12%) it was high. Out of 152 cases in 149 cases (98%) CPK was normal and in 3 cases (2%) it was high. Gender-wise comparison of amylase, lipase and CPK was also carried out in 152 cancer patients. Out of 152 patients 91 were male and 61 were female. Among 91 male patients 64 male cases (70%) were having normal amylase level and in 27 cases (30%), amylase level was high. Study of 61 female cases revealed that in 50 female cases (82%) amylase was normal and in 11 cases (18%) it was high. In. 78 male cases (86%) lipase was normal and in 13 male cases (14%) it was high. In 56 female cases (92%) lipase was normal and in 5 female cases (8%) lipase was high. In 88 male cases (97%) CPK was normal and in 3 male cases (3%) CPK was high. CPK level was normal in all 61 cases of female. Comparison of amylase with lipase and CPK and that of lipase with CPK was also carried out. Among 152 patients, 114 cases were found to have normal level of amylase. Out of 114 cases, in 109 cases (96%) lipase was normal and in 5 cases (4%) lipase was high. Moreover, out of 152 cases, in 38 cases amylase was high. Out of these 38 cases, in 25 cases (66%) lipase was normal but in 13 cases (34%) lipase was high. Comparison of amylase with CPK was also done. It shows that out of 152 cases, in 114 cases amylase was normal. Out of these 114 cases, in 111 cases (97%) CPK was normal and in 3 cases (3%) CPK was high. Moreover, out of 152 cases, in 38 cases amylase was high. Out of these 38 cases, in 38 cases (100%) CPK was normal. Comparison of lipase with CPK shows that out of 152 cases, in 134 cases lipase was normal. Out of these 134 cases, in 131 cases (95%) CPK was normal and in 3 cases (5%) CPK was high. Out of 152 cases, in 18 cases lipase was high and in 18 cases (100%) CPK was normal. Correlation of amylase with lipase, amylase with CPK and lipase with CPK was also carried out. There is positive correlation between amylase and lipase. Amylase and CPK have negative correlation. Lipase and CPK have negative correlation. Elevation in amylase, lipase and CPK levels in cancer patients is either due to some cancer or some chemotherapeutic effect.