

Albumin-corrected serum calcium and serum parathyroid hormone-related polypeptide determined by enzyme-linked immunosorbent assay in cirrhotic patients with hepatocellular carcinoma – a pilot study

Parathyroid hormone-related peptide (PTHrP) is produced by many malignant tumors. It is responsible for most cases of hypercalcemia in patients with malignancy. Few published studies shed light on the relation between serum calcium levels and serum PTHrP levels in cirrhotic patients with hepatocellular carcinoma (HCC).

Aim

The aim of the current work was to evaluate serum PTHrP in cirrhotic patients with HCC and a possible correlation between serum PTHrP levels and albumin-corrected serum calcium levels in these patients.

Patients and methods

This is a cross-sectional study. The study included 35 cirrhotic patients with HCC (diagnosed depending upon α -fetoprotein and abdominal imaging studies). Data about their serum albumin and albumin-corrected serum calcium levels were collected. Sera of the studied patients were collected for determination of PTHrP levels by enzyme-linked immunosorbent assay (ELISA). Numerical data were summarized in the form of mean \pm SD. Strength of association between variables was tested using Pearson correlation coefficient.

Results

Approximately 8.6% of studied patients were hypercalcemic, and no statistically significant positive correlation was detected between serum PTHrP determined by ELISA and albumin-corrected serum calcium in these patients.

Conclusion

Approximately 8.6% of studied cirrhotic patients with HCC were hypercalcemic. NO statistically significant positive correlation was detected between serum PTHrP determined by ELISA and albumin-corrected serum calcium in these patients. Studies involving a larger number of patients could clarify the exact role of PTHrP in the development of hypercalcemia in cirrhotic patients with HCC.