UPPER GASTROINTESTINAL SYMPTOMS, ENDOSCOPIC AND PATHOLOGICAL FEATURES, AND SERUM GASTRIN AND CHROMOGRANIN A LEVELS IN PATIENTS WITH PRIMARY HYPERPARATHYROIDISM

Osman Ersoy¹, Berna Evranos Ogmen², Sefika Burcak Polat³, Levent Ozturk⁴, Berrak Gumuskaya Ocal⁵, Bekir Cakır³, Reyhan Ersoy³

¹ Yildirim Beyazit University, Faculty of Medicine, Department of Gastroenterology, Ankara, Turkey

² Ataturk Education and Research Hospital, Department of Endocrinology and Metabolism, Ankara, Turkey

³ Yildirim Beyazit University, Faculty of Medicine, Department of Endocrinology and Metabolism, Ankara, Turkey

⁴ Yildirim Beyazit University, Faculty of Medicine, Department of Anesthesiology, Ankara, Turkey

⁵Yildirim Beyazit University, Faculty of Medicine, Department of Pathology, Ankara, Turkey

Introduction

Fupper gastrointestinal(UGI) symptoms are frequently encountered in patients with primary hyperparathyroidism(PHPT). Some of these symptoms may improve after PHPT treatment, while hypercalcemic state may also cause permanent effects. We aimed to evaluate UGI symptoms, UGI endoscopic and pathologic features and determine the relationship between these features with serum chromogranin A (CgA) and gastrin in PHPT patients.

Methods

▶71 patients diagnosed with PHPT were included in the study after exclusion of patients who refused UGI endoscopy, had an UGI surgery or used drugs that affect serum chromogranin A or gastrin. Patients were questioned regarding UGI symptoms. Serum CgA and gastrin were measured. Endoscopy was performed and gastric biopsy specimens were taken to evaluate atrophic gastritis.

Results

There were 60 females and 11 males, and median age was 52 years. Mean serum CgA and gastrin levels were 134.10±19.43 ng/ml (28-620) and 219.39±48.6 pg/ml (14-2255), respectively.

Dyspepsia, epigastric pain and weight loss were the most common symptoms and presented in 61%, 51.7% and 46.6% of patients, respectively. Endoscopy was normal in 25(35.2%) patients. Erosive antral gastritis, atrophic gastritis, gastric ulcers, duedonal ulcers, reflux gastritis and nodular gastritis were present in 14 (19.7%), 12 (16.9%), 6 (8.5%), 5 (7%), 4 (5.6%) and 4 (5.6%)patients, respectively. Intestinal metaplasia, gastric atrophy, gastric neuroendocrine tumor and Helicobacter pylori infection were detected in 29.2%, 20%, 1.4% and 66.2% of patients, respectively. Serum CgA was similar in patients with and without atrophic gastritis, while serum gastrin was higher in patients with atrophic gastritis (p=0.024). Presence of intestinal metaplasia and Helicobacter pylori infection did not affect serum CgA and gastrin levels

Conclusion

Dyspeptic symptoms are common in patients with PHPT. The frequencies of atrophic gastritis and peptic ulcers are increased. We think that patients with PHPT should be questioned for UGI symptoms and evaluated with UGI endoscopy when needed.