

that the putative genetic factors associated with achalasia are specific for this disease.

#### P.09.14

### ENDOSCOPIC TREATMENT OF ZENKER'S DIVERTICULA WITH SEPTUM REMOVAL: DESCRIPTION AND PRELIMINARY RESULTS OF A NEW TECHNIQUE

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**Background and aim:** Flexible endoscopy has been introduced as an option for the treatment of Zenker's diverticula, by dividing the septum between the esophagus and the pouch. The incision can be made using a needle knife or, alternatively, argon plasma coagulation or a hook knife, usually with a single incision of the septum. The aim of this study is to assess the feasibility and outcome of a new technique, with the removal of the septum by two incisions, to avoid the healing of the site of incision with septum recurrence.

**Material and methods:** Two lateral incisions were performed and the tissue between the two cuts was removed with a polypectomy snare. 28 patients underwent flexible endoscopic treatment. Nineteen patients (68%, group A) underwent a single incision of the septum, while 9 (32%, group B) were treated with a double incision. Median age was 73 (55–86) years for group A and 77 years (59–86) for group B; ten (52%) were males and 9 (48%) females in group A, 7 (77%) were males and 2 (23%) were females in group B. Median preoperative symptoms score was 10 (0–22) in group A and 9 (0–20) in group B, according to dysphagia and regurgitation severity and frequency. The median size of the pouch was 20 mm (10–50 mm) in both groups. All patients were evaluated for symptoms using a detailed questionnaire and they had preoperative barium swallow.

**Results:** All patients underwent division of the septum with a mean of 2 (1–3) sessions for group A and 1 session for group B (1–2). A microperforation occurred in only a patient (5.2%) in group A, there were not complications in group B. The median follow-up was 58 months (7–102) for group A and 7 months (5–24) for group B.

After our treatment, in 16 patients (84%) of group A symptoms disappeared or improved significantly, while three patients (16%) had a poor result, one and which required a surgical revision with diverticulectomy. In group B all patients had a good result. The mean postoperative symptoms score was 3.3 in group A (0–13) and 0.7 (0–3) in group B.

**Conclusions:** Our data suggest that performing a double incision of the diverticular septum might increase the success of treatment, with the limitation of the small number of patients and the short follow-up of cases treated with the new technique.

#### P.09.15

### ACHALASIA TREATMENT IMPROVES SPECIFIC SYMPTOMS AND QUALITY OF LIFE: VALIDATION OF AN ACHALASIA SPECIFIC QUALITY OF LIFE QUESTIONNAIRE

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**Background and aim:** Therapies for achalasia aim to patients' symptom relief, but they affect patient's quality of life (QoL), too. An ad hoc questionnaire evaluating both achalasia-related symptoms and disease related QoL is lacking.

**Aim:** To validate a disease specific QoL questionnaire in perspective evaluated Italian achalasia patients.

**Material and methods:** 22 consecutive achalasia patients (4 men, age range 19–86 years) were included in the study. At baseline a structured questionnaire was used to evaluate both esophageal symptoms and disease specific QoL. Questionnaire graded achalasia-related symptoms severity (dysphagia

for solids and liquids, food regurgitation, chest pain, nocturnal cough) from 0 to 3, based on their impact on daily activities. Also a disease specific QoL was evaluated by a self administered questionnaire, the AE-18, that investigated four domains (physical, psychological and social functioning, and sleep disturbance). Scores for each item range from 1 ("always") to 5 ("never"); higher scores corresponding to better quality of life. All patients were questioned before, 1 and 6 months after a specific treatment regimen, that according to patients clinical status consisted in pneumatic dilation, botulinum toxin injection or surgical myotomy.

**Results:** Patients within each specific treatment groups were the following (3/22 surgical myotomy, 14/22 pneumatic dilation and 5/22 Botox injections, respectively). In the table are reported the baseline demographics and achalasia-related symptoms' severity and QoL (data are expressed as mean±SD) within each treatments group.

Table 1

	Surgery group	Dilation group	Botox group	p
Age at diagnosis	42.3±6.5	42.3±13	81.8±4.8	<0.001
Age at onset of symptoms	39.3±7.5	40.3±12.4	80.8±5.6	<0.001
Dysphagia for solids	2.7±0.6	2.2±0.7	2.2±0.5	0.5
Dysphagia for liquids	2.0±1.0	2.1±0.7	2.2±0.5	0.9
Regurgitation of undigested food	1.0±1.7	0.7±0.8	0.6±1.3	0.8
Chest pain	0.7±1.1	1.1±1.1	1.0±1.4	0.8
Nocturnal cough	1.3±1.5	1.3±1.2	1.0±1.4	0.9
AE-18 total score	54±14	53±12	53±11	0.9

At both 1 and 6 months of the follow-up, the severity mean scores of dysphagia achalasia-related symptoms severity were significantly reduced compared to baseline (p<0.05). Similarly, the AE-18 total score was significantly improved (p<0.001).

**Conclusions:** We showed that therapy-induced improvement of achalasia-related symptoms correlate with a significant improvement of patients quality of life as assessed by a specific questionnaire.

#### P.09.16

### A YOUNG WOMAN WITH DYSPHAGIA

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**Background and aim:** Plummer-Vinson syndrome is characterized by a classical triad of dysphagia, iron deficiency anemia and esophageal webs. Epidemiologic data are fragmentary: the syndrome is rare, most of the patients are white women in the fourth to seventh decade of life. Etiopathogenesis is unknown; the most likely etiological factors are iron deficiency and malnutrition. Dysphagia is usually painless, intermittent or progressive over years and selective for solids. Additional features are glossitis, angular cheilitis and koilonychia. Since Plummer-Vinson syndrome is associated with an increased risk of upper alimentary tract cancers, the follow-up programme must be regular, strict and life-long. We here describe a rare case of Plummer-Vinson syndrome in a young woman.

**Material and methods:** A 18-year old girl from Ivory Coast was admitted to a gastroenterology outpatient clinic for the evaluation of a seven-month history of dysphagia for solids, chest pain, and vomiting. The past medical history was recorded. Hematochemical parameters were evaluated. A barium swallow and an esophagogastroduodenoscopy (EGD) were performed.

**Results:** The symptoms had been progressive, and were worsening in frequency and intensity. Inquiry into her dietary intake found that she was strictly vegetarian and she reported heavy menstruation bleedings. Laboratory tests revealed a severe microcytic anaemia (haemoglobin 5.7 g/dL; mean corpuscular volume 44.2 fL), with decreased iron stores (plasma ferritin 2 ng/mL). A stained film of peripheral blood showed hypochromia, microcytosis and mild poikilocytosis. A barium swallow showed a constriction of the proximal esophagus and the EGD confirmed the presence of an upper esophageal web, which was fractured using dilators. Workup for anemia (including measurement of anti-tissue transglutaminase antibodies, stool examination for occult blood, gynecological evaluation) was negative, except a mild increase of hemoglobin C. A diagnosis of Plummer-Vinson syndrome was assessed and intravenous iron supplementation was prescribed.