1459 - Watermelon Stomach in Systemic Sclerosis: A EUSTAR Case-Control Study

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Hall F2 - Poster Hall (McCormick Place West)

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Background/Purpose: Watermelon stomach (WS) or Gastric Antral Vascular Ectasia (GAVE) is a very rare gastric complication of Systemic Sclerosis (SSc). It has a unique endoscopic appearance that is characterized by multiple longitudinal stripes of red vessels which radiate in a spoke-like fashion from the pylorus to the antrum. In SSc, WS seems to be a component of the general microangiopathy that characterises the disease and it is thought as a severe complication. However, despite the large use of gastroscopy, prevalence of SSc-GAVE remains poorly known. Furthermore, the characteristics of SSc-GAVE remain poorly described and based on the few available data, SSc features of SSc-GAVE patients remain unclear. The aim of this study was to determine the subgroup at risk together with the outcomes of SSc patients with GAVE.

Method: We performed a retrospective, multicenter, international, case/control study. We collected cases of SSc-GAVE cases through EUSTAR network. Every case was matched with 2 SSc controls recruited from the same center, matched for age, sex, cutaneous subtype and disease duration. Disease characteristics were recorded at the time of GAVE occurrence and the last observation was used to defined the outcomes.

Result: We included 23 cases of SSc patients with GAVE, who were compared to 42 SSc controls. These 23 SSc patients (20 women, 87%) had a mean ± standard deviation (SD) age of 58±13 years and a mean ± SD disease duration of 6±3 years; 13 had the diffuse cutaneous subset and 10 the limited. Among these patients, 22 (96%) had anaemia, 10 (43%) needed red blood cell transfusion, and 12 (52%) required endoscopic treatment. In addition, SSc patients with GAVE were more likely to have anti-RNA polymerase-III antibodies (14/23, 60% vs. 9/42, 21%, p=0.009), decreased frequency of anti-topoisomerase-I antibodies (1/23, 4% vs. 11/42, 26%, p=0.02) and DLCO/AV<75% predicted (16/23, 68% vs. 12/42, 28%, p=0.01) compared to SSc patients without GAVE. The likelihood of other SSc-related disease characteristics were not different between cases and controls. After a follow-up of 35±27 months, 7 (30%) SSc patients had a relapse of bleeding requiring new local endoscopic treatment. Among these 7 patients, 4 needed red blood cell transfusion.

Conclusion: Absence of antitopoisomerase I antibodies and presence of antibodies to RNA-Polymerase-III antibodies may be useful to identify the subset of SSc patients with increased risk for GAVE. Despite it was described as a late complication, SSc patients with GAVE had early disease duration. GAVE appears as a cause of anaemia that clinicians should be aware of. This complication often requires local endoscopic therapy, which is usually efficient, despite frequent recurrent events. The inclusion of further cases in this ongoing project may help to better characterise the features of this rare complication.

Keywords: gastrointestinal complications and systemic sclerosis

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