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Present situation of diagnosis and treatment for Dieulafoy's disease

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Abstract

AIM: To present the fundamental conception, summarize the progress in diagnosis and treatment, and deepen medical workers' understanding of Dieulafoy's disease.

METHODS: 144 cases of Dieulafoy-s disease from home and abroad in recent 3 years have been reviewed in this paper by means of studying the literature. The summarization has been made in 5 respects retrospectively.

RESULTS: (1) Incidence: Of the 68 cases reported from abroad the incidence of Dieulafoy's disease was 3.7% among the total cases of massive upper gastrointestinal hemorrhage in the corresponding period. The male-female ratio was 6 to 1. The mean age of the patients was 65 years old. Almost half of the lesions located in the proximal portion of stomach. Moreover, lesions outside stomach was increasing in number, especially in rectum. There were 2 lesions in bronchi, amazingly. 76 cases have been reported at home in recent three years. The ratio of male and female was 7 to 1. The mean age was 49 years old. 51% of Dieulafoy's lesions were within a radius of 6 cm below the cardia in these patients. 13 of them accounted for 1.08% of the total cases with upper gastrointestinal hemorrhage during the corresponding period. (2) Pathology and pathogeneses: The pathological features were elliptical erosion or damage in mucosa with an artery nub (diameter 1 mm-3 mm) extruding the center of the lesion. The lesions lay within 6 cm area below cardia frequently. A few Dieulafoy-s lesions located in small intestine, large bowel, esophagus and bronchi. The pathogeneses: The artery going into gastric wall did not taper off normally but kept its constant diameter. A special damageable region was formed because the artery was fixed to the mucosa by Wanken fibre fasciculus. Break of constant diameter artery was brought about by mucosa damage as a result of some harmful factors such as excessive drinking, bile reflux, intake of some medicine and shearing force arising from gastric peristalsis. (3) Clinical manifestations and diagnosis: The manifestations of Dieulafoy-s disease were massive haematemesis and melaena without any evident reason frequently, often followed by hypovolemic shock. Diagnosis was made by means of endoscopy, selective angiography, isotopic scan, ultrasonic endoscopy and laparatomy, ect. Emergency endoscopy should be the first of choice. Repeated examination or examination after gastric lavage should be done if necessary. Diagnostic rate was 25%-60% with endoscopy. Blood spurting from a small artery nub in Dieulafoy-s lesion was seen in 55%-66% of the patients. The rate of firm diagnosis was higher than before. (4) Treatments: Treatments for Dieulafoy-s disease were chiefly endoscopic therapy and surgery. The edoscopic therapy was carried out with injecting sclerosants or tissue glue, electrocoagulation, laser, microwave. A few of them were treated with endoscopic band ligation and clips. The curative effects have been improving. The stanching rate was 2/6-18/20. The efficacy rate of stanching was lower with spraying stancher without injection. The surgical way was usually wedge resection or laparoscopic wedge resection of the lesion. (5) Prognosis: The patients undergone endoscopic or surgical therapy often had a favorable prognosis. 93% of them were cured if exact bleeding lesion was found and proper measures were taken promptly. Few serious complications of endoscopic therapy were reported. Patients only undergone conservative treatment died mostly. The mortality of Dieulafoy's disease in this paper was 4.4%. Actually it may be higher, however.

CONCLUSION: Dieulafoy-s disease is a rare cause of gastrointestinal hemorrhage. The feature is a break of constant diameter artery in the lesion pathologically. The presentation of the disease is violent clinically. The common manifestations are massive haematemesis, melaena ad hypovolemic shock. The diagnosis depends mainly on endoscopy. Blood spurting from the small artery in Dieulafoy-s lesion is seen commonly. The curative effect with endoscopic injection is satisfactory generally. Wedge resection of the lesion should be adopted by surgery routinely. Most of the patients with a right diagnosis can be cured. The key to raise curative rate and decrease mortality are that every medical worker is aware of Dieulafoy's disease, and that emergency endoscopy are widely performed so that the diagnosis is made as soon as possible.

Key words: Dieulafoy disease/pathology; Dieulafoy disease/diagnosis; Dieulafoy disease/therapy

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