Cirrhosis associated hemosuccus pancreaticus – a systematic review.

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Introduction: Hemosuccus pancreaticus (HP) is defined as bleeding from the ampulla of Vater via the pancreatic duct. The bleeding can arise from any of the peripancreatic arteries and is difficult to diagnose because of the anatomic location.

Methodology: PubMed, Embase and Medline were used to conduct the literature review using Boolean operator strategy of: (cirrhosis) AND (((pseudohemobilia) OR (hemosuccus pancreaticus)) OR (wirsungorrhaghia)) on 07/28/2022.

Inclusion criteria:
HP with liver cirrhosis.
>18 years of age

Exclusion criteria:
Age less than 18 years
Absence of liver cirrhosis
Full text not available

Article titles were analyzed for eligibility by 2 independent reviewers. Full-text articles were reviewed after the initial screening. Extracted data included outcome, treatments, presenting features, and artery involved.

Statistical Analysis

Descriptive and summary statistics were used to describe the patients' socio-demographic parameters, with continuous variables in mean with standard deviation. The categorical variables were reported as numbers with percentages. All data were analysed using Jamovi version 1.2 (created in 2020, Sydney, Australia).

Results:

2 cases of HP associated with cirrhosis were reported in 2020 and 1 each reported in 2011,2015,2016,2017. Four conference abstract (66.7%) and two case reports (33.7%) were included.

The mean age at presentation was 54 +/- 8.32 years. Males were disproportionally affected (5, 83.3%) compared to female (1, 16.7%). The most common risk factor was underlying alcohol use (5, 83.3%), followed by alcoholic cirrhosis (n=4, 66.7%), and chronic pancreatitis (n=4, 66.7%). The most common presenting symptoms were abdominal pain and anemia (n=5, 83.3%), followed by melena (n=3, 50%), hematemesis (n=2, 33.37%), and hematochezia (n=1, 16.7%).

Gastroduodenal and distal splenic arteries were affected in 2 cases each (33.3%). Inferior pancreatic and pancreatic magna arteries were involved in 1 case each (16.7%). Half of the cases were treated with coiling (n=3, 50%) while other half had embolization done (n=3, 50%). Embolization failed in 1 of the cases (33.3%). 5/6 patients were discharged home (83.3%), data is not available for 1 patient.

Discussion

HP is a rare yet potentially life-threatening cause of upper GI hemorrhage. Diagnosis requires high degree of clinical suspicion and is primarily imaging based. Cirrhosis, chronic pancreatitis and alcohol use are associated with HP. Early diagnosis and treatment is associated with favorable outcomes.

Characteristic	Result
Type of article n=6	
Conference abstract	4
Case report (journal)	2
Demographics	
Age years n=6	
Gender n=6	54+/- 8.32
Female	1 (16.7%)
Male	5 (83.3%)
risk factors	
Chronic pancreatitis n=6	4 (66.7%)
Alcohol use n=5	5 (83.3%)
Cirrhosis n=6	6 (100%)
Alcoholic cirrhosis n=4	4 (66.7%)
Presenting symptoms	
Melena n=3	3 (50%)
Hematemesis n=2	2 (33.37%)
Hematochezia n=1	1 (16.7%)
Abdominal pain n=5	5 (83.3%)
Anemia n=5	5 (83.3%)
Artery Involved n=6	
Gastroduodenal artery	2 (33.3%)
Distal splenic artery	2 (33.3%)
Inferior pancreatic artery	1 (16.7%)
Pancreatic magna artery	1 (16.7%)
Treatment/procedures n=6	
Coiling	3(50%)
Embolization	3(50%)
Outcome n=5	
Discharged	5 (83.3%)

Table 1: Results of various variables from the systematic review

References:

1-Ülkü A, Sarıtaş AG, Topal U, Çoğal İ, Üsküdar O, Akçam AT. Hemosuccus pancreaticus A case report and review of the literature. Ann Ital Chir. 2020;91:27-34. PMID: 32180580.
2.https://journals.lww.com/ajg/Fulltext/2021/10001/S3588_Hemosuccus_Pancreatitis__A_Rare_Cause_of.3592.aspx