Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/13308
DOI URL: http://dx.doi.org/10.21474/IJAR01/13308

RESEARCH ARTICLE

MYOEPITHELIAL HAMARTOMA OF THE STOMACH COMPLICATED BY GASTRIC OBSTRUCTION

Radouane Chouiba, Taeb Lachgar, Abdelkrim Laalou, Mohamed Laaroussi, Mohamed El Fahssi, Abderrahmane Elhjouji, Mbarek Yaka and Abdelmounaim Ait Ali

Manuscript Info

Manuscript History
Received: 20 June 2021
Final Accepted: 24 July 2021
Published: August 2021

Key words:-
Gastricmyoepithelialhamartoma, Gastricoutlet Obstruction, Distal Gastrectomy

Abstract

Itis about a patient 52 yearold,presents to the emergency room for incoercible vomiting and state of dehydration. The investigations show hydroelectrolityicdisorderswith a pyloricstenosis on the imagery. after urgent conditioning of the patient heunderwent partial gastrectomysurgerywithgastrojejunalanastomosis. Anatomopathology of the operativespecimen shows a stenosingpyloricBrunerichamartoma; the post-operativeconsequences are satisfactory

Introduction:-

With the exception of leiomyomas, submucosaltumors of the stomach are extremely rare. brunner's glands are branchedacinotubular glands normallyfound in the deepmucosal or submucosallayers of the proximal duodenum and secretealkalinebased mucus to protect the duodenalliningfrom the gastricacid andmostlyasymptomaticBrunner's gland hyperplasia canpresent as gastrointestinal (GI) bleeding, obstruction, and abdominal pain in symptomatic cases 1. Histologically, thistumorpresentshypertrophicsmooth muscle bands surrounding diverse epithelialelementsthatcanbearranged in differentways: as a simple glandular structure, Brunner's gland, pancreaticducts, and occasionallypancreatic acinus 2.

We report an unusual case of Brunner's gland hyperplasia in the pylorusleading to severegastricoutlet obstruction requiringsurgical intervention

Case report

A 52-year-male patient presented to the emergency room for uncontrollablevomiting, hissymptoms go back a yearwith the installation of post prandial vomiting first to solidsthen to liquidswithouthematemesis or melena, clinicalexamination on admission, hemodynamically and respiratory stable patient; supple abdomen, His vital signs objective hisbloodparametershemoglobin13.2 g/dl (13.8–17.7), total leukocyte count 5000 cells/cumm (4000–11000), potassium 1 ,8 g/dl serumalkaline phosphatase 96 U/L (50–130), and serum).the patient benefited in the emergency departmentfrom a 2-way venousoutlet for rehydrationwith potassium refillthenfrom a gastricfibroscopyobjectifyingpre-pyloriculcer and impassable stenosisHistologicalfindings on biopsysamples of the lesion and itsbordersrevealedhypertrophicendothelia and granulation tissue, leiomuscular bands infltrated by lymphocytes, plasma cells, granulocytes and rare distorted gland architecture and varying degrees of epithelialdysplasia. He was positive for *Helicobacterpylori*(*HP*) the abdominal scanner revealedpy loricstenos is with stas is stomach The patient underwentlaparoscopic distal gastrectomywithgastrojejunostomy. Histopathologicalexamination of the specimenconfirmedBrunner's gland hyperplasia. No postoperative complications occurred and ourpatient'sgeneral conditions were optimal atdischarge 7 daysaftersurgery. Twomonthspostoperativelyhisgeneralhealth conditions are still good

Corresponding Author:- Radouane Chouiba

Figure 1:- SAGITTAL CUP of abdominal scannercompletegastricoutlet obstruction

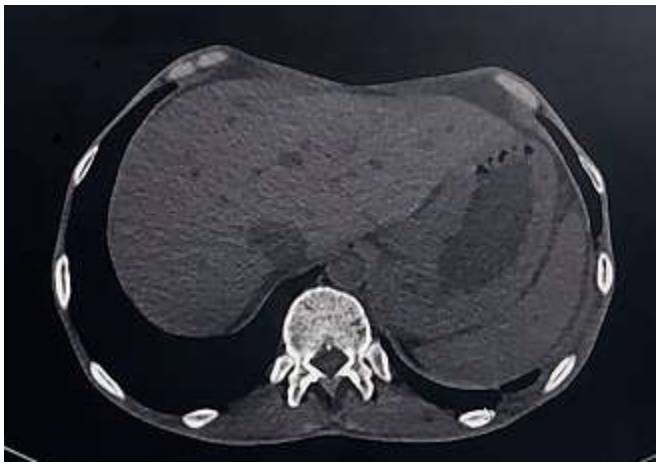

Figure 2:-Axial cut of abdominal scanner completegastricoutlet obstruction

Discussion:-

Brunner's gland issubmucosalmucin-secretingacinar glands of the duodenumwhichsecretes mucus, pepsinogen, and urogastrone as a response to stimulation by gastricacid, to protect the duodenalmucosa 3.Myoepithelialhamartoma of the stomachis a rare tumorand isalsoreferred to as myoglandularhamartoma, adenomyomatoushamartoma, gastricadenomyoma, adenomyosis and heterotopia 4,5. Histologically, they are branchedacinotubular glands coveredwithcuboidalcells in the ducts and cuboidal to columnarcells in the gland 6.Suchlesions have been observed in the gastric antrum(85%) and in the pylorus (15%); theypresentnonspecificsymptomssuch as intermittent gastric pain, nausea and vomiting, and in some patients cause intermittent pyloricobstruction 7our case presented a pyloric obstruction withvomiting Most of the cases reported in the literaturewerediagnosed by conventional X-rays of the upper digestive tract using a bariummeal, while the other cases weredetectedincidentallyduringsurgery or autopsy 7. Hamartomasoftenappear as a roundish or ovalshapedmass in the submucosal tissue simulating a lipoma, a neurofibroma or a polypoid formation 2. Our case detectedduringsurgery. Conservative treatmentwith proton-pumpinhibitor and antacids are sufficient for treatment of Brunner's gland hyperplasia whenthe patient isasymptomatic 8. If the patient issymptomatic, endoscopicresection, laparoscopic, or laparotomymayberequired 9. If the lesionispedunculated and <5 cm in size, thenendoscopicresectionisdone. In case of lesions, >5 cm laparoscopic or open surgical excision ispreferred 10. In our case, weplanned for surgical intervention.

Radical surgeryisalsojustified in cases of a definitediagnosis of hamartoma as the lesionisvery rare and may not bebenign, and the risk of cancerizationisstill an open question 11. Generallyspeaking, gastricpolyps are considered to have alowrisk of cancerization, yet the risk of neoplasticdegenerationishigher for hyperplasticadenomatouspolyps and fundicglandularpolyps directly correlated with HP infection. Cancer has been detectedin 2.1% of hyperplasticgastricpolyps 12,13 an in 1.6% of gastrichamartous polyps14,15 alsomakesour case distinct.

Another possible relationshipbetweenpepticulcer and Brunner's gland hyperplasia isthatboth have an association with*H. pylori*16. The patient, in this case, tested positive for *H. pylori*. Presence of Brunner's gland hyperplasia in

the region of the antropylorusleading to severegastricoutlet obstruction.The patient underwentlaparoscopic distal gastrectomywithgastrojejunostomy. Histopathologicalexamination of the resectedspecimenconfirmedit to beBrunner's gland hyperplasia. Post-operativehospitalstaywasuneventful.

References:-

1. Bernard DS, Amin J, Baltayan A, Richard Hu. Brunner's gland hyperplasia: A rare cause of gastricoutlet obstruction and a review of treatmentstrategies. J GastroenterolHepatolRes 2015;4:1698-701.
2. Lasser A, Koufman WB: Adenomyoma of the stomach. Am J DigDis, 22: 965-969, 1977.
3. Janes SE, Zaitoun AM, Catton JA, Aithal GP, Beckingham IJ. Brunner's gland hyperplasia at the ampulla of vater. J Postgrad Med 2006;52:38-40.
4. Levine JA, Burgart LJ, Batts KP, Wang KK. Brunner's gland hamartomas: Clinicalpresentation and pathologicalfeatures of 27 cases. Am J Gastroenterol 1995;90:290-4.
5. Wani ML, Malik AA, Malik RA, Irshad I. Brunner's gland hyperplasia: An unusual cause of gastrointestinalbleeding. Turk J Gastroenterol 2011;22:419-21.
6. Brookes MJ, Manjunatha S, Allen CA, Cox M. Malignantpotential in a brunner's gland hamartoma. Postgrad Med J 2003;79:416-7.
7. Chapple CR, Muller S, Newman J: Gastricadenocarcinoma associatedwithadenomyoma of the stomach. Postgrad Med J, 64: 801-803, 1988.
8. Kirmemış Ö, Çaltepe G, Süllü Y, Biçakci Ü, Aritürk E, Kalayci AG, *et al*. Diffuse circumferential hyperplasia of brunner's glands causing obstruction in the duodenum in a 12-year-old child. Turk J Gastroenterol 2012;23:414-5.
9. Gokhale U, Pillai GR. Large brunner's gland hamartoma: A Case report. Oman Med J 2009;24:41-3.
10. Gao YP, Zhu JS, Zheng WJ. Brunner's gland adenoma of duodenum: A case report and literaturereview. World J Gastroenterol 2004;10:2616-7.
11. Ly DP, Barnard NJ, Schwarz R: Gastricadenomyoma: definitely benign or defiantlypremalignant? DigDisSci, 49: 1930-1934, 2004.
12. Daibo M, Itabashi M, Hirota T: Malignanttrasformation of gastrichyperplasticpolyps. Am J Gastroenterol, 82: 1016-1025, 1987.
13. Borch K, Skargard J, Franzen L, Mardh S, Rehfeld JF: Benign gastricpolyps: morphological and functionalorigin. Dig Dis Sci, 48: 1292-1297, 2003.
14. Iishi H, Tatsuta M, Okuda S: Clinicopathologicalfeatures andnaturalhistory of gastrichamartomatouspolyps. DigDis Sci, 34: 890-894, 1989.
15. Itoh K, Tsuchigame T, Matsukawa T, Takahashi M, Honma K, Ishimaru Y: Unusualgastricpolypshowingsubmucosal proliferation of the glands: Case report and literaturereview. J Gastroenterol, 33: 720-723, 1998.
16. Kovacević I, Ljubicić N, Cupić H, Doko M, Zovak M, Troskot B, *et al*. *Helicobacterpylori*infection in patients withBrunner's gland adenoma. Acta Med Croatica 2001;55:157-60.