Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 87260

Title: Type II Abernethy Malformation with Cystic Fibrosis in a 12-year-old Girl: A Case Report

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03260869
Position: Editorial Board
Academic degree: MD, MSc
Professional title: Doctor, Full Professor, Professor
Reviewer's Country/Territory: Egypt
Author's Country/Territory: China

Manuscript submission date: 2023-08-01

Reviewer chosen by: Geng-Long Liu (Quit 2023)

Reviewer accepted review: 2023-08-12 02:59

Reviewer performed review: 2023-08-13 16:01

Review time: 1 Day and 13 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [Y] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[ ] Grade A: Priority publishing [ ] Grade B: Minor language polishing [Y] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [Y] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

It was a pleasure to read the manuscript titled: " Type II Abernethy Malformation with Cystic Fibrosis in 12-year-old Girl: A Case Report". Abstract: "The patient, a 12-year-old female, presented with a medical history of recurring respiratory infections and hemoptysis. Upon diagnosis, Abernethy malformation was identified, as confirmed by chest computed tomography (CT) revealing bronchial dilatation. Notably, the physician's attention was drawn to the presence of splenomegaly during the progression of the disease. The enhanced CT of the abdomen showed tortuous and dilated splenic vessels, irregular liver morphology, and pancreatic atrophy, which was considered a possible Abernethy malformation. Intraoperatively, the abnormal blood flow was seen to merge into the inferior vena cava through the left renal vein without hepatic processing" This part of the abstract needs to be re-written to clarify the sequence of clinical suspicion and detailed diagnosis of the case. The conclusion in ABSTRACT section needs to be re-written as well to conclude what the authors actually reported in their case. "Children who have Abernethy malformation in combination with CF are exceptionally uncommon in clinical cases and necessitate a detailed clinical history, as

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

well as comprehensive laboratory and imaging assessments, in order to augment the precision of the diagnosis." In the Case Summary, the part on Laboratory data is very irrelevant to the case :"Laboratory test findings were as follows: Blood routine: WBC 3.28×10^9/L, PLT 84×10^9/L; fecal occult blood: negative; blood biochemistry: ALT 28.0 U/L, AST 38.0 U/L, CK-MB 15.0 U/L; serum thyroid function test:TT3 2.33mmol/L, FT3 6.22pmol/L. FT3 6.22pmol/L, TT4 97.58mmol/L, FT4 16.61pmol/L; sputum culture: positive for mycoplasma antibodies; bone marrow aspiration: partial dilution bone marrow image; the four tumor tests : AFP 1.66ng/m, CEA 1.63ng/mL, NSE 10.87ng/mL, CA19-9 90.95↑ng/mL; fiberoptic bronchoscopy alveolar lavage: numerous erythrocytes and inflammatory cells, 74% neutrophils,6% lymphocytes,20% macrophages were seen." Lab results have to be relevant to the case. The most relevant is sputum culture which showed mycoplasma antibodies!!! Abdominal ultrasound and Doppler study are messed up; results of abdominal imaging needs to be written in a clearer way to be able to reach such a diagnosis as Abernathy malformation. "Ultrasound of portal vein system:internal diameter of main trunk of portal vein 8mm, maximum flow velocity: 19.3cm/s, slightly tortuous, splenic vein the internal diameter of the splenic vein was 11 mm, with tortuous course and slowed flow velocity, and tortuous vascular echogenicity was seen around the stomach base. The whole abdomen was enhanced with CT (Figure 1C、1Dand 1E):plenomegaly, multiple tortuous dilated vessels at the splenic hilum, irregular liver morphology, and pancreatic atrophy". In the Treatment section, the diagnosis and management are messed up: a diagnosis has to be made before an intervention is done. "TREATMENT After the pulmonary infection improved, she was transferred to the general surgery department and underwent “ligation of abnormal branches of portal vein and liver biopsy” on 2021-10-20 after excluding the relevant contraindications. During the intraoperative procedure, observations revealed hepatic shrinkage, significant splenic enlargement, and tortuous alterations in the splenic vessels. The

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

inferior margin of the spleen exhibited looseness, accompanied by the identification of an abnormally thickened vessel measuring approximately 0.8 cm in diameter, which was observed to be draining into the left renal vein. The central venous catheter remained in situ via the terminal jejunum vein, and portal vein pressure measurements recorded values of 17.1 cmH2O and 23.1 cmH2O before and after occlusion of the abnormal shunt, respectively. 20 minutes after blocking, no stasis changes were seen in the intestinal canal, kidney and spleen, and the branches of the portal vein were seen on portal venography. The abnormal shunt vessels were ligated, and no abdominal organ stasis changes were seen, and some tissues of the right lobe of the liver were taken for pathological examination. Pathological return: (Figure 2): portal vein branches were dysplastic, dilated or absent, which was consistent with Abernethy malformation type II in combination with clinical and imaging." Re=phrasing is needed for this part to delineate the abnormal anatomy revealed in this child: "The intraoperative venography and postoperative pathology confirmed portal vein dysplasia, and the anomalous blood flow was unprocessed by the liver through the left renal vein into the inferior vena cava, which supported the diagnosis of Abernethymalformation type II[8, 9]. This abnormal shunt caused elevated portal vein pressure, tortuous changes in the splenic vessels, and varicose veins of the fundus, but did not present with vomiting or lower gastrointestinal bleeding." The explanation of splenomegaly in the Discussion section is unclear : "There is evidence suggesting a potential association between Abernethy malformation and cystic fibrosis (CF) with the occurrence of splenomegaly. However, the underlying mechanisms differ, with Abernethy malformation being attributed to inadequate blood return to the splenic vein, and CF being associated with congenital dysplasia[10-12]. Therefore, it is hypothesized that the splenomegaly observed in this child is a result of a combination of both diseases." What is "congenital dysplasia", what is "inadequate blood return to splenic vein?" Is it the aim of this case summary to emphasize the importance

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

of differentiation in history taking between hematemesis and hemoptysis? "Patients with Abernethy malformation accompanied with upper gastrointestinal varices may have hematemesis after food stimulation, and CF may also have massive hemoptysis due to bronchiectasis. When inquiring about the history, it is imperative to exercise caution in accurately identifying the two conditions."?