Call for Editorial Board Members

As you are well aware that we are a medical and health sciences publishers; publishing peer-reviewed journals and books since 2004.

We are always looking for dedicated editorial board members for our journals. If you completed your master's degree and must have at least five years experience in teaching and having good publication records in journals and books.

If you are interested to be an editorial board member of the journal; please provide your complete resume and affiliation through e-mail (i.e. info@ rfppl.co.in) or visit our website (i.e.www.rfppl.co.in) to register yourself online.

Call for Publication of Conference Papers/Abstracts

We publish pre-conference or post-conference papers and abstracts in our journals, and deliver hard copy and giving online access in a timely fashion to the authors.

For more information, please contact:

For more information, please contact:

A Lal
Publication-in-charge
Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi – 110 091 (India).
Phone: 91-11-79695648

E-mail: info@rfppl.co.in

Free Announcements of your Conferences/Workshops/CMEs

This privilege to all Indian and other countries conferences organizing committee members to publish free announcements of your conferences/ workshops. If you are interested, please send your matter in word formats and images or pictures in JPG/JPEG/Tiff formats through e-mail attachments to sales@rfppl.co.in.

Terms & Conditions to publish free announcements:

- 1. Only conference organizers are eligible up to one full black and white page, but not applicable for the front, inside front, inside back and back cover, however, these pages are paid.
- 2. Only five pages in every issue are available for free announcements for different conferences.
- 3. This announcement will come in the next coming issue and no priority will be given.
- 4. All legal disputes subject to Delhi jurisdiction only.
- 5. The executive committee of the Red Flower Publication reserve the right to cancel, revise or modify terms and conditions any time without prior notice.

For more information, please contact:

A Lal
Publication-in-charge
Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi – 110 091 (India).
Phone: 91-11-79695648

E-mail: info@rfppl.co.in

Win Free Institutional Subscription!

Simply fill out this form and return	scanned copy through e-mail or by	post to us.	
Name of the Institution			
Name of the Principal/Chairman_			
Management (Trust/Society/Govt.	/Company)		
Address 1	_		
Address 2	_		
Address 3	_		
City			
Country			
PIN Code			
Mobile			
Email			
We are regular subscriber of Red Fl	ower Publication journals.		
Year of first subscription			
List of ordered journals (if you subs	scriberd more then 5 titles, please at	tach separate sheet)	
Ordered through			
Name of the Vendor	Subscription Voor	Diract/subs Vr	
Name of the Vendor	Subscription Year	Direct/subs Yr	
Name of the Vendor	Subscription Year	Direct/subs Yr	
Name of the Vendor	Subscription Year	Direct/subs Yr	
Name of the Vendor	Subscription Year	Direct/subs Yr	
		Direct/subs Yr	
Name of the Vendor Name of the journal for which you		Direct/subs Yr	
Name of the journal for which you Terms & Conditions to win free institu	wish to be free winner utional subscription	Direct/subs Yr	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa	wish to be free winner utional subscription te in this scheme	Direct/subs Yr	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i	wish to be free winner utional subscription te in this scheme nstitution would be winner	Direct/subs Yr	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal	Direct/subs Yr	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner on	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal	,	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal	Dec)	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal slid for one year only (i.e. 1 Jan – 31 inewable, however, can be renewed with the street of the stree	Dec)	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal alid for one year only (i.e. 1 Jan – 31 in newable, however, can be renewed with the service of the service	Dec) with payment	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De 9. This scheme will be available	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal slid for one year only (i.e. 1 Jan – 31 inewable, however, can be renewed with the street of the stree	Dec) with payment	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De	wish to be free winner utional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal ulid for one year only (i.e. 1 Jan – 31 newable, however, can be renewed with the series of the series	Dec) with payment draw will be held in last week of	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De 9. This scheme will be available August every year 10. The executive committee of the terms and conditions any time	wish to be free winner tional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal slid for one year only (i.e. 1 Jan – 31 newable, however, can be renewed veripate after five years lhi jurisdiction only to participate throughout year, but e Red Flower Publication reserve the without prior notice.	Dec) with payment draw will be held in last week of the right to cancel, revise or modify	
Name of the journal for which you Terms & Conditions to win free institut 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De 9. This scheme will be available August every year 10. The executive committee of the	wish to be free winner tional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal slid for one year only (i.e. 1 Jan – 31 newable, however, can be renewed veripate after five years lhi jurisdiction only to participate throughout year, but e Red Flower Publication reserve the without prior notice.	Dec) with payment draw will be held in last week of the right to cancel, revise or modify	
Name of the journal for which you Terms & Conditions to win free institu 1. Only institutions can participa 2. In group institutions only one i 3. Only five institutions will be w 4. An institution will be winner of 5. The free subscription will be va 6. This free subscription is not rer 7. Any institution can again partic 8. All legal disputes subject to De 9. This scheme will be available August every year 10. The executive committee of the terms and conditions any time	wish to be free winner tional subscription te in this scheme nstitution would be winner inner for each journal nly for one journal slid for one year only (i.e. 1 Jan – 31 newable, however, can be renewed veripate after five years lhi jurisdiction only to participate throughout year, but e Red Flower Publication reserve the without prior notice.	Dec) with payment draw will be held in last week of the right to cancel, revise or modify	

4					
Revised Rates for 2022 (Institutional)	Frequency	India(INR) Print Only	India(INR) Online Only	Outside India(USD) Print Only	Outside India(USD) Online Only
Title of the Journal Community and Public Health Nursing	3	6000	5500	469	430
Indian Journal of Agriculture Business	2	6000	5500	469	430
Indian Journal of Anatomy	4	9000	8500	703	664
Indian Journal of Ancient Medicine and Yoga	4	8500	8000	664	625
· ·	6	8000	7500	625	586
Indian Journal of Anesthesia and Analgesia	2	6000	5500	469	430
Indian Journal of Biology Indian Journal of Cancer Education and Research	2	9500	9000	742	703
Indian Journal of Canter Education and Research	2	9000	8500	703	664
Indian Journal of Dental Education	4	6000	5500	469	430
Indian Journal of Diabetes and Endocrinology	2	8500	8000	664	625
Indian Journal of Emergency Medicine	4	13000	12500	1016	977
Indian Journal of Emergency Medicine Indian Journal of Forensic Medicine and Pathology	4	16500	16000	1289	1250
	2			469	430
Indian Journal of Counties and Malaysian Research	2	6000	5500 7000		
Indian Journal of Louisian Human Rehavior	3	7500 6500	7000	586 508	547 469
Indian Journal of Law and Human Behavior	2	9000	6000 8500	703	664
Indian Journal of Legal Medicine	3	10000	9500	703 781	742
Indian Journal of Library and Information Science	2			781 781	742
Indian Journal of Maternal-Fetal & Neonatal Medicine	2	10000	9500		
Indian Journal of Medical and Health Sciences		7500	7000	586	547
Indian Journal of Obstetrics and Gynecology	4	10000	9500	781	742
Indian Journal of Pathology: Research and Practice	6	12500	12000	977	938
Indian Journal of Plant and Soil	2	7000	6500	547	508
Indian Journal of Preventive Medicine	2	7500	7000	586	547
Indian Journal of Research in Anthropology	2	13000	12500	1016	977
Indian Journal of Surgical Nursing	3	6000	5500	469	430
Indian Journal of Trauma and Emergency Pediatrics	4	10000	9500	781	742
Indian Journal of Waste Management	2	10000	9500	781	742
International Journal of Food, Nutrition & Dietetics	3	6000	5500	469	430
International Journal of Forensic Science	2	10500	10000	820	781
International Journal of Neurology and Neurosurgery	4	11000	10500	859	820
International Journal of Pediatric Nursing	3	6000	5500	469	430
International Journal of Political Science	2	6500	6000	508	469
International Journal of Practical Nursing	3	6000	5500	469	430
International Physiology	3	8000	7500	625	586
Journal of Animal Feed Science and Technology	2	8300	7800	648	609
Journal of Cardiovascular Medicine and Surgery	4	10500	10000	820	781
Journal of Emergency and Trauma Nursing	2	6000	5500	469	430
Journal of Forensic Chemistry and Toxicology	2	10000	9500	781	742
Journal of Global Medical Education and Research	2	6400	5900	500	461
Journal of Global Public Health	2	12500	12000	977	938
Journal of Microbiology and Related Research	2	9000	8500	703	664
Journal of Nurse Midwifery and Maternal Health	3	6000	5500	469	430
Journal of Orthopedic Education	3	6000	5500	469	430
Journal of Pharmaceutical and Medicinal Chemistry	2	17000	16500	1328	1289
Journal of Plastic Surgery and Transplantation	2	26900	26400	1954	575
Journal of Psychiatric Nursing	3	6000	5500	469	430
Journal of Social Welfare and Management	4	8000	7500	625	586
New Indian Journal of Surgery	6	8500	7500	664	625
Ophthalmology and Allied Sciences	3	6500	6000	508	469
Pediatric Education and Research	4	8000	7500	625	586
Physiotherapy and Occupational Therapy Journal	4	9500	9000	742	703
RFP Indian Journal of Medical Psychiatry	2	8500	8000	664	625
RFP Journal of Biochemistry and Biophysics	2	7500	7000	586	547
RFP Journal of Dermatology (Formerly Dermatology International)	2	6000	5500	469	430
RFP Journal of ENT and Allied Sciences (Formerly Otolaryngology International)	2	6000	5500	469	430
RFP Journal of Hospital Administration	2	7500	7000	586	547
Urology, Nephrology and Andrology International	2	8000	7500	625	586
Coming Soon					
RFP Gastroenterology International Journal of Food Additives and Contaminants	2 2	-	-	-	-
Journal of Food Technology and Engineering	2	_	_	_	
Journal of Radiology	2	_	_	-	_
Medical Drugs and Devices	3	_	_	_	_
RFP Indian Journal of Hospital Infection	2	_	_	_	_
RFP Journal of Gerontology and Geriatric Nursing	2	_	_	_	_

Terms of Supply:

- Agency discount 12.5%. Issues will be sent directly to the end user, otherwise foreign rates will be charged. All back volumes of all journals are available at current rates.

 All journals are available free online with print order within the subscription period.

 All legal disputes subject to Delhi jurisdiction.

 Cancellations are not accepted orders once processed.

 Demand draft/cheque should be issued in favour of "Red Flower Publication Pvt. Ltd." payable at Delhi.

 Full pre-payment is required. It can be done through online (http://rfppl.co.in/subscribe.php?mid=7).

 No claims will be entertained if not reported within 6 months of the publishing date.

 Orders and payments are to be sent to our office address as given below.

 Postage & Handling is included in the subscription rates.

- 10. Postage & Handling is included in the subscription rates.11. Subscription period is accepted on calendar year basis (i.e. Jan to Dec). However orders may be placed any time throughout the year.

Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091 (India) Mobile: 8130750089, Phone: 91-11-79695648, E-mail: info@rfppl.co.in, Website: www.rfppl.co.in

Gastroenterology International

Editor-in-Chief

A.C. Arun

Velammal Medical College Hospital and Research Institute, Madurai, Tamil Nadu

National Editorial Advisory Board

Anshuman Kaushal,

Artemis Healthcare, Gurgaon

D. Viswanath Reddy,

Yashoda Hospital, Secunderabad

Deepu Rajkamal Selvaraj,

GG Super-Speciality Hospitals, Chennai

G.N. Yattoo,

Sher-i-Kashmir Institute of Medical Sciences (SKIMS), Srinagar

Hrushikesh Chaudhari,

Asian Institute of Gastroenterology, Hyderabad

Joy Varghese,

Global Hospitals & Health City, Chennai

Kaushal Kishor Prasad,

Postgraduate Institute of Medical Education & Research, Chandigarh

M. Suneeel Chakravarty,

Max Superspeciality Hospital, New Delhi

M. Umadevi,

PACE Hospital -Gastro Center Hospitals, Hyderabad

Mayank Chugh,

Chugh Multispecialty Hospital and Fertility Centre, Bhiwani.

P.R. Venugopal,

PK Das Institute of Medical Sciences, Palakkad

Shravan Kumar Bohra,

Apollo Hospitals International, Ahmedabad

Sudershan Kapoor,

Govt. Medical College, Amritsar

T.S. Bala Shanmugam,

PSG Institute of Medical Sciences and Research,

Coimbatore

V.G. Mohan Prasad,

VGM Hospital, Coimbatore

Managing Editor

A. Lal

Publication Editor

Dinesh Kumar Kashyap

All right reserved. The views and opinions expressed are of the authors and not of the **The Gastroenterology International**. **The Gastroenterology International** does not guarantee directly or indirectly the quality or efficacy of any product or service featured in the advertisement in the journal, which are purely commercial.

Corresponding address

Red Flower Publication Pvt. Ltd. 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I Delhi - 110 091 (India). Phone: 91-11-79695648 E-mail: info@rfppl.co.in, Web: www.rfppl.co.in

The Gastroenterology International (GI) (ISSN: 2456-5458) is published by Red Flower Publication Pvt. Ltd. and is devoted to publishing timely medical research in gastroenterology and hepatology. GI provides practical and professional support for clinicians dealing with the gastroenterological disorders seen most often in patients. Regular features include articles by leading authorities and reports on the latest treatments for diseases. Original research is organized by clinical and basic-translational content, as well as by alimentary tract, liver, pancreas, and biliary content.

Subscription Information

India

Institutional (1 year): Rs. 6000

Rest of the World

Insitutional (1 year) USD 469

Payment methods

Bank draft / cashier & order / check / cheque / demand draft / money order should be in the name of **Red Flower Publication Pvt. Ltd.** payable at **Delhi**.

International Bank transfer / bank wire / electronic funds transfer / money remittance / money wire / telegraphic transfer / telex

- 1. Complete Bank Account No. 604320110000467
- 2. Beneficiary Name (As per Bank Pass Book): Red Flower Publication Pvt. Ltd.
- 3. Address: 41/48, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi 110 091(India)
- 4. Bank & Branch Name: Bank of India; Mayur Vihar
- 5. **Bank Address & Phone Number:** 13/14, Sri Balaji Shop,Pocket II, Mayur Vihar Phase- I, New Delhi 110091 (India); Tel: 22750372, 22753401. **Email:** mayurvihar.newdelhi@bankofindia.co.in
- 6. **MICR Code:** 110013045
- 7. Branch Code: 6043
- 8. IFSC Code: BKID0006043 (used for RTGS and NEFT transactions)
- 9. Swift Code: BKIDINBBDOS
- 10. Beneficiary Contact No. & E-mail ID: Mobile: 8130750089, Phone: 91-11-79695648, E-mail: sales@rfppl.co.in

Gastroenterology International

January - December 2021 Volume 6, Number 1-2

Contents

Original Article	
Single Time EUS Guided Aspiration of Caudate Lobe Abscess is less Painful	9
Viswanath Reddy Donapati, Guduru R Srinivas Rao, Ravishankar Bagepally	
Review Article	
Recovery Rate and Hospitalization Stay Patient Treated with Corticosteroids	
Alone, Along with Antiviral Oral and Intravenous: Faviparavir & Remdesivir: 40	
Patients Clinical study	17
Mayank Chugh, Satender Tanwar	
Case Report	
Acute Abdomen Unusual Presentation of Pancreatitis: Late Rise of Serum	
Amylase than the CTSI of Balthazar Scoring	23
Mayank Chugh, Satender Tanwar, Jaideep Bagri	
Subject Index	27
Author Index	28
Guidelines for Authors	29



Red Flower Publication (P) Ltd. Presents its Book Publications for sale	
1. Beyond Medicine: A to E for Medical Professionals) (2020) Kalidas Chavan	INR390/USD31
2. Biostatistical Methods For Medical Research (2019) Sanjeev Sarmukaddam	INR549/USD44
3. Breast Cancer: Biology, Prevention And Treatment (2015) Dr. A. Ramesh Rao	INR 395/USD31
4. Chhotanagpur A Hinterland of Tribes (2020) Ambrish Gautam	INR250/ USD20
5. Child Intelligence (2004) Dr. Rajesh Shukla, Md, Dch.	INR100/ USD50
6. Clinical Applied Physiology and Solutions (2020) Varun Malhotra	INR263/USD21
7. Comprehensive Medical Pharmacology (2019) Dr. Ahmad Najmi	INR599/USD47
8. Critical Care Nursing in Emergency Toxicology (2019) Vivekanshu Verma	INR460/USD34
9. Digital Payment (Blue Print For Shining India) (2020) Dr. Bishnu Prasad Patro	INR329/USD26
10. Drugs in Anesthesia (2020) R. Varaprasad	INR449/USD35
11. Drugs In Anesthesia and Critical Care (2020) Dr. Bhavna Gupta	INR595/USD46
12. MCQs in Medical Physiology (2019) Dr. Bharati Mehta	INR300/ USD29
13. MCQs in Microbiology, Biotechnology and Genetics (2020) Biswajit Batabyal	INR285/USD22
14. MCQs In Minimal Access & Bariatric Surgery (2019) Anshuman Kaushal	INR450/USD35
15. MCQs In Minimal Access and Bariatric Surgery (2nd Edition) (2020) Anshuman Kaushal	INR545/USD42
16. Patient Care Management (2019) A.K. Mohiuddin	INR999/USD78
17. Pediatrics Companion (2001) Rajesh Shukla	INR 250/USD50
18. Pharmaceutics-1 (A Comprehensive Hand Book) (2021) V. Sandhiya	INR525/ USD50
19. Poultry Eggs of India (2020) Prafulla K. Mohanty	INR390/USD30
20. Practical Emergency Trauma Toxicology Cases Workbook (2019) Dr. Vivekanshu Verma, Dr. Shiv Rattan Kochar, Dr. Devendra Richhariya	INR395/USD31
21. Practical Record Book of Forensic Medicine & Toxicology (2019) Dr. Akhilesh K. Pathak	INR299/USD23
22. Recent Advances in Neonatology (2020) Dr. T.M. Ananda Kesavan	INR 845/USD66
23. Shipping Economics (2018) Dr. D. Amutha	INR347/USD45
24. Skeletal and Structural Organizations of Human Body (2019) Dr. D.R. Singh	INR659/USD51
25. Statistics In Genetic Data Analysis (2020) S.Venkatasubramanian	INR299/USD23
26. Synopsis of Anesthesia (2019) Dr. Lalit Gupta	INR1195/USD75
Order from Red Flower Publication Pvt. Ltd. 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091(India) Mobile: 8130750089, Phone: 91-11-79695648, E-mail: info@rfppl.co.in	

Single Time EUS Guided Aspiration of Caudate Lobe Abscess is less Painful

Viswanath Reddy Donapati¹, Guduru R Srinivas Rao², Ravishankar Bagepally³

How to cite this article:

Viswanath Reddy Donapati, Guduru R Srinivas Rao, Ravishankar Bagepally/Single Time EUS Guided Aspiration of Caudate Lobe Abscess is less Painful/Gastroenterology International. 2021;6(1-2):9-13.

Abstract

Background: Percutaneous drainage of the liver abscess may be difficult in caudate lobe abscess due to the anatomical position. It is also associated with significant pain and few complications. Surgical management of such abscesses is associated with morbidity. An alternative option is Endoscopic ultrasound guided aspiration or drainage through stomach wall in view of anatomic proximity to the caudate lobe.

Methods: Five consecutive patients who presented with symptomatic caudate lobe liver abscess were selected from 2015 till 2019. In all the five patients, percutaneous drainage was considered difficult by the interventional Radiologist. In them, Endosonography guided aspiration/drainage was done through the gastric wall under sedation.

Results: All the five patients had a successful clinical outcome with less pain following EUS guided abscess drainage.

Conclusion: EUS guided aspiration or drainage of liver abscesses is feasible, less painful and a safe option in patients where percutaneous drainage may be difficult.

Keywords: Caudate Lobe Liver abscess; Endosonography (EUS); EUS guided Abscess Drainage; Painless, Ultrasound guided abscess drainage.

Introduction

Liver abscess is infectious space occupying lesion in liver parenchyma. It could be Pyogenic or Amebic origin. The most common source is biliary followed by abdominal infection and hematogenous spread.

Author Affiliation: ¹⁻³Consultant Gastroenterologist, Department of Gastroenterology, Yashoda Hospital, Secunderabad Hyderabad, Telangana, 500003, India.

Corresponding Author: Viswanath Reddy Donapati, Consultant Gastroenterologist, Department of Gastroenterology, Yashoda Hospital, Secunderabad Hyderabad, Telangana, 500003, India.

E-mail: viswanathdr@yahoo.com

Received on: 17.10.2021 **Accepted on:** 30.11.2021

In tropical countries, Amebic liver abscess is the more common variety found.¹⁰⁻¹³

In both the types, the right lobe of liver is the most common involved site nearly 70%. Involvement of the Caudate lobe is less common. The clinical presentation is similar in all types with Fever, pain abdomen and hepatomegaly with or without jaundice. Presentation can be with septic shock or peritonitis if there occurs a free rupture of abscess.

The mainstay of treatment is Antibiotics combined with drainage of abscess. Traditionally, percutaneous drainage of liver abscess is done in cases with features of impending rupture or left lobe abscess or not improving clinically with conservative management for 72 hours. If complicated or ruptured abscess, then surgical management is indicated.

Percutaneous aspiration is associated with few complications like pain, bleeding, biliary peritonitis and fistula formation.¹³

EUS guided aspiration or drainage of liver abscess has been described by several endosonographers with good results and safety.¹⁻⁸

In this series we describe 5 cases of caudate lobe liver abscesses which were managed by aspiration under EUS guidance. The patients had good outcome with less pain and no complications were noted.

Materials and Methods:

It is a retrospective cohort study where 5 consecutive cases of caudate lobe liver abscess were included. They were taken for EUS guided drainage in view of difficult percutaneous access. They had not responded well to antibiotics.

EUS was done using the Olympus curvilinear echoendoscope.

Procedure was done under sedation using Propofol.

Imaging was done using the echoendoscope and abscess was identified and comfortable point to access was noted and a 19 G needle was inserted into the abscess avoiding vessels with the help of doppler mode. Aspiration of maximal possible volume was done using suction syringe. If thick pus was noted, sterile saline was injected and reaspiration was done. Pus was sent for analysis. Antibiotics were continued and adjusted according to the sensitivity report. Patients were followed up with an ultrasound once discharged.

All the five patients showed good clinical response with complete resolution of abscess on follow up.

Case 1: 58 year old man presented with epigastric pain, fever, and chills for 3 days. At the emergency department, he had features of severe sepsis. He was resuscitated and CT abdomen was done which demonstrated a 45 x 25 mm caudate lobe abscess. Because the hepatic abscess was inaccessible to percutaneous drainage, EUS-guided drainage was considered. EUS image is provided in Figure no. 1.

Nearly 70 ml of pus was aspirated from the abscess using 19 gauge access needle. Pus was sent for culture and sensitivity which grew Klebsiella pneumonia. Appropriate antibiotics were given and patient improved clinically. Follow up was done for 3 months when the check ultrasound howed resolution of the abscess.



Fig. 1: Abscess in Caudate lobe of Liver.

Case 2: 40 year old male with no comorbidities with history of significant ethanol intake, presented with pain abdomen and fever of 10 days duration. He was evaluated and noted to have a space ocupying lesion of 3.1x3 cm in caudate lobe. Alpha Feto Protein was normal. It was not accessible through ultrasound guidance in view of large vessels closeby. EUS showed a well defined lesion with hypoechoic nature in caudate lobe. EUS guided aspiration of the lesion revealed purulent material. 25cc of pus was aspirated and sent for analysis. He was treated with antibiotics as per the culture and sensitivity report. There were no malignant cells on cytology report. He was then managed with antibiotics and had uneventful recovery.

Case 3: 55 year old female presented with pain abdomen of 20 days duration followed by fever, jaundice and then distension of abdomen with swelling of feet for 15 days duration. She was evaluated and noted to have a large liver abscess compressing the inferior venacava. Budd-Chiari syndrome like presentation was noted. Antibiotics were initiated and percutaneous aspiration was done, 100 ml of pus drained. Pigtail catheter placement into the abscess cavity could not be done. Patient had persisting pedal edema and ascites. He needed drainage of the abscess. Hence EUS was considered. EUS Image is provided in figure No. 2 and 3. EUS guided aspiration of the residual large abscess was done. 120 ml of pus was aspirated using 19G needle. Compression on the IVC was noted to be reduced. Patient had gradual resolution of symptoms following it.



Fig. 2: Abscess partially compressing IVC.

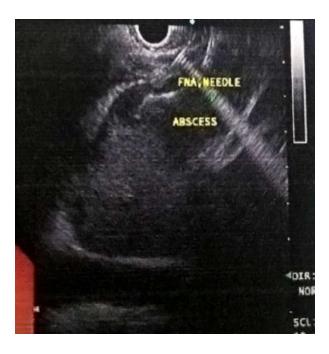


Fig. 3: Aspiration of abscess.

Case 4: 50 year old male with history of significant alcohol intake, presented with pain abdomen and fever. Jaundice was noted on examination with tender hepatomegaly. Evaluation was suggestive of abscess measuring 5.5x4 cm in caudate lobe of liver and hepatitis. Percutaneous aspiration was not feasible, because of difficult access. EUS image is provided in Figure No. 4. EUS guided aspiration of the abscess was done using 19G needle. Patient improved with course of antibiotics for 6 weeks. Resolution of the abscess was documented on ultrasound after 3 months.



Fig. 4: Abscess in caudate lobe.

Case 5: 32 year old male presented with pain in right upper quadrant with general debility of 10 days duration. There was no history of fever. Anorexia was present. Ultrasound abdomen showed a well defined heterogenous predominantly hypoechoic lesion suggestive of abscess of 5.1x4.9 cm in Caudate lobe of liver. EUS guided aspiration of pus was done and patient had good clinical response with antibiotics following that.

Discussion and review of literature

Liver abscess is collection of pus and necrotic material within liver parenchyma. Usually right lobe of liver is affected. In about 30% of cases the left lobe may be involved. In about 20% of cases multiple abscesses may be seen.¹⁰

Traditional approach to managing liver abscess includes antibiotics, drainage of the abscess percutaneously or surgically.

Percutaneous aspiration is easily available, can be done bedside, with lower cost, good technical success of 100% and clinical success of >85%. 10-13 Even multiple abscesses can be attended at a time while doing the procedure. However, it may be associated with significant pain, bleeding risk, risk of biliary peritonitis and fistula formation.

Some locations in liver may be difficult to access percutaneously for drainage particularly caudate lobe abscess due to presence of large vessels close by. In patients with ascites and respiratory distress, percutaneous drainage is not recommended. Even in confused and agitated patient, percutaneous drainage is not advisable because of risk of

accidental removal by patient. Surgical management is indicated in case of rupture liver abscess which has higher morbidity and mortality. Hence an alternative approach for abscess drainage may be considered. In this regard, several case reports of successful drainage of liver abscesses under EUS guidance have been reported. Literature search was done for endoscopic ultrasound guided liver abscess drainage procedure.

Noh et al¹ have successfully done drainage of caudate lobe abscess under EUS guidance which could not be done percutaneously.

John koehane² et al have successfully drained transgastrically caudate lobe abscess.

Itoi et al and Shei Wei et al also have successfully drained caudate lobe abscesses under EUS guidance. Hiroshi et al have drained liver abscess under EUS guidance using a metal stent.^{3,4,8}

We aspirated the pus under EUS guidance in the cases described. We have done a single time procedure which was painless to the patient as compared to percutaneous drainage method. We have not placed any stent inside the abscess. Antibiotics were continued along with supportive care. Patients recovered well and were noted to have complete resolution of abscess on follow up.

Therapeutic endoscopic ultrasound is expanding in clinical application from it being the first line in managing pancreatic and peripancreatic collections to the latest in failed ERCP for EUS guided biliary access. EUS guided Liver abscess drainage also is a feasible, safe and reliable option where percutaneous aspiration is not feasible as described in multiple case reports. However there are certain limitations for EUS guided liver abscess drainage.

Limitations of EUS guided drainage of liver abscesses include the following

- Limited availability of EUS and accessories
- Technical expertise and skill, manpower.
- Right lobe liver abscess may not be easily accessible for EUS guided procedure.
- Cost of procedure
- Need for anaesthesia and intubation if needed

Implications

Endosonography guided liver abscess drainage is one newer modality to manage difficult caudate lobe abscess drainage and which is safe and efficacious, less painful method.

There is however a need for more evidence like a

randomised trial before considering as first line in management of liver abscess drainage.

Conclusion

Endoscopic ultrasound guided caudate lobe liver abscess aspiration or drainage is a technically feasible, less painful and safe alternative option in patients where percutaneous access is difficult.

Acknowledgement

We thank Dr. Murari for providing sedation for the procedures. We also thank Mrs. Subhashini and Mrs. Geetha for assisting in the EUS procedure

Disclosures

Authors 1 and 2: There is no corporate/commercial relationship that might pose a conflict of interest. There are no consultantships, honoraria, stock ownership, gifts, free or reimbursed travel/vacations, equity interests, arrangements regarding patents or other vested interests.

References

- 1. EUS-guided drainage of hepatic abscesses not accessible to percutaneous drainage, Noh SH Gastrointest Endosc. 2010 Jun;71(7):1314-9. doi: 10.1016/j.gie.2009.12.045. Epub 2010 Apr 18.
- 2. EUS-guided transgastric drainage of caudate lobe liver abscesses; John Keohane, Christopher J DiMaio, Mark A Schattner, and Hans Gerdes; J Interv Gastroenterol. 2011 Jul-Sep; 1(3): 139–141.
- 3. Endoscopic ultrasonography guided drainage for tuberculous liver abscess drainage, Takao Itoi, DigestiveEndoscopy (2011) 23 (Suppl. 1), 158–161.
- Endoscopy 2011; 43 A142; Treatment of hepatic abscess by EUS-guided fine needle aspiration and lavage: case report; Shi Wei,
- Therap Adv Gastroenterol. 2014 Mar; 7(2): 93–98. doi: 10.1177/1756283 X 13506178; Endoscopic ultrasound guided hepatic and perihepatic abscess drainage: an evolving technique; Shashideep Singhal.
- 6. EUS-Guided Drainage of Liver Abscesses: Ultra Uncertain or Sound Practice? Maria Chiara Petrone1
- 7. Paolo Giorgio Arcidiacono1; Dig Dis Sci (2016) 61:8–10 DOI 10.1007/s10620-015-3900-hepatic applications of endoscopic ultrasound: Current status and future directions Indu Srinivasan; World J Gastroenterol 2015 November 28; 21(44): 12544-12557
- 8. Endoscopic ultrasonography-guided liver abscess

- drainage using a dedicated, wide, fully covered self-expandable metallic stent with flared-ends; Kawakami Hiroshi et al; Endoscopy 2014; 46: E982– E983
- 9. Endoscopic ultrasound-guided interventions in special situations Varayu Prachayakul, Pitulak Aswakul; World J Gastrointest Endosc 2016 January 25; 8(2): 104-112.
- 10. Cai YL, Xiong XZ, Lu J, et al. Percutaneous needle aspiration versus catheter drainage in the management of liver abscess: a systematic review and meta-analysis. HPB (Oxford). 2015;17:195–201.
- 11. Lee KT, Wong SR, Sheen PC. Pyogenic liver abscess: an audit of 10 years' experience and analysis of risk factors. Dig Surg. 2001;18:459–466.
- 12. Alvarez Pe rez JA, Gonza lez JJ, Baldonedo RF, et al. Clinical course, treatment, and multivariate analysis of risk factors for pyogenic liver abscess. Am J Surg. 2001;181:177–186.
- 13. Zerem E, Omerovic S, Kunosic S. Sonographically guided percutaneous treatment of liver abscesses in critically Ill patients. J Clin Ultrasound.. 2014; 42:527–533.



Red Flower Publication Pvt. Ltd.

CAPTURE YOUR MARKET

For advertising in this journal

Please contact:

International print and online display advertising sales

Advertisement Manager Phone: 91-11-79695648, Cell: +91-9821671871 E-mail: info@rfppl.co.in

Recruitment and Classified Advertising

Advertisement Manager Phone: 91-11-79695648, Cell: +91-9821671871 E-mail: info@rfppl.co.in

REDKART.NET

(A product of RF Library Services (P) Limited) (Publications available for purchase: Journals, Books, Articles and Single issues) (Date range: 1967 to till date)

The Red Kart is an e-commerce and is a product of RF Library Services (P) Ltd. It covers a broad range of journals, Books, Articles, Single issues (print & Online-PDF) in English and Hindi languages. All these publications are in stock for immediate shipping and online access in case of online.

Benefits of shopping online are better than conventional way of buying.

- 1. Convenience.
- 2. Better prices.
- 3. More variety.
- 4. Fewer expenses.
- 5. No crowds.
- 6. Less compulsive shopping.
- 7. Buying old or unused items at lower prices.
- 8. Discreet purchases are easier.

URL: www.redkart.net

Instructions to Authors

Submission to the journal must comply with the Guidelines for Authors. Non-compliant submission will be returned to the author for correction.

To access the online submission system and for the most up-to-date version of the Guide for Authors please visit:

http://www.rfppl.co.in

Technical problems or general questions on publishing with **GI** are supported by Red Flower Publication Pvt. Ltd.'s Author Support team (http://rfppl.co.in/article_submission_system.php?mid=5#)

Alternatively, please contact the Journal's Editorial Office for further assistance.

Editorial Manager

Red Flower Publication Pvt. Ltd. 48/41-42, DSIDC, Pocket-II Mayur Vihar Phase-I Delhi - 110 091(India).

Mobile: 9821671871, Phone: 91-11-79695648 E-mail: author@rfppl.co.in

Recovery Rate and Hospitalization Stay Patient Treated with Corticosteroids Alone, Along with Antiviral Oral and Intravenous: Faviparavir & Remdesivir: 40 Patients Clinical study

Mayank Chugh¹, Satender Tanwar²

How to cite this article:

Mayank Chugh, Satender Tanwar/Recovery Rate and Hospitalization Stay Patient Treated with Corticosteroids Alone, Along with Antiviral Oral and Intravenous: Faviparavir & Remdesivir: 40 Patients Clinical study/Gastroenterology International. 2021;6(1-2):17-19.

Abstract

COVID 19 is a deadly Pandemic and effecting people throughout the world. Whole world is looking for the varied option for treatment and the second wave has almost caused the lot of mortality and morbidity. Lot of patient came out with the complications such as Mucormycosis, raised glycemic level with many more adverse reaction.

The corticosteroids being the most important remedy later proved to the disease enhancement and complication. In the similar way the antiviral drugs used are either Oral and intravenous not caused much of reduction n the mortality and hospitalization stay.

No specific antiviral drugs have been approved for the treatment of COVID-19. Favipiravir is a promising drug for COVID-19 that decreases the hospital stay and the need for mechanical ventilation.²

In this present study the 40 patient have been treated with three groups made treated with Corticosteroids alone, along with Antiviral Oral and Intravenous: Favipiravir & Remdesivir.

After analyzing the data is found that none of the antiviral has made significant reduction in the hospitalization stay treated at IPD of chugh Multispeciality Hospital.

Thus concluded that patient treated along with corticosteroids along with Antiviral oral and intravenous doesn't make any significant changes in the hospital stay.

Keywords: COVID; Pandemic; Antiviral; Oral; Intravenous; Corticosteroids; Favipiravir and Remedisivir.

Introduction

The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in the air, and

Author Affiliation: ¹Gastroenterologist, ²Associate Consultant, Department of Gastroenterology, Chugh Multispecialty Hospital, Bhiwani 127021, Haryana, India.

Corresponding Author: Satender Tanwar, ²Associate Consultant, Department of Gastroenterology, Chugh Multispecialty Hospital, Bhiwani 127021, Haryana, India.

E-mail: drsatendertanwar@gmail.com

Received on: 30.07.2021 **Accepted on:** 30.11.2021

quickly fall on floors or surfaces.3

You can be infected by breathing in the virus if you are within close proximity of someone who has COVID-19, or by touching a contaminated surface and then your eyes, nose or mouth. COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.⁴

- Most common symptoms:
- Fever
- Dry cough
- Tiredness.

No specific antiviral drugs have been approved for the treatment of COVID-19. This study aimed

to evaluate the efficacy of favipiravir in treatment of COVID-19. This was a multicenter randomized controlled study including 96 patients with COVID-19 who were randomly assigned into a chloroquine (CQ) group and a favipiravir group. Favipiravir is a promising drug for COVID-19 that decreases the hospital stay and the need for mechanical ventilation.⁵

Corticosteroids patients with severe COVID-19 can develop a systemic inflammatory response that can lead to lung injury and multisystem organ dysfunction. It has been proposed that the potent anti-inflammatory effects of corticosteroids might prevent or mitigate these deleterious effects. The Randomised Evaluation of COVID-19 Therapy (Recovery) trial, a multicenter, randomized, openlabel trial in hospitalized patients with COVID-19, showed that the mortality from COVID-19 was lower among patients who were randomized to receive dexamethasone than among those who received the standard of care.⁶

The safety and efficacy of combination therapy of corticosteroids and an antiviral agent targeting severe acute respiratory syndrome coronavirus 2 (Sars-CoV-2) for the treatment of COVID-19 have not been rigorously studied in clinical trials. However, there are theoretical reasons that such combination therapy may be beneficial in patients with severe disease.

Rationale for Use of Corticosteroids in Patients with COVID-19both beneficial and deleterious clinical outcomes have been reported with use of corticosteroids (mostly prednisone or methylprednisolone) in patients with other pulmonary infections.⁷

Corticosteroids have been studied in critically ill patients with acute respiratory distress syndrome (Ards) with conflicting results. Seven randomized controlled trials that included a total of 851 patients evaluated use of corticosteroids in patients with Ards.

Remedisivir: The Union Health Ministry on Friday has revised the dosage of the antiviral drug Remdesivir, being administered to hospitalized COVID-19 patients from the earlier six-days to five-day treatment.

According to the Health Ministry, remdesivir drug is only for restricted emergency use on patients with moderate disease (those on oxygen support). The drug can not be administered to a pregnant or lactating mother and children below the age of 12 years. Also, the drug is not recommended to a patient with severe renal impairment and a high

level of liver enzymes.8

The Central Health Ministry has issued a fresh clinical management protocol for COVID-19 patients on Friday. In the latest protocol, the ministry has informed the dosage of remdesivir should be - 200 mg IV on day 1 followed by 100 mg IV daily for 4 days (5 days in total).

Favipiravir A recent outbreak of coronavirus disease 2019 (COVID-19) caused by the novel coronavirus designated as severe acute respiratory syndrome coronavirus 2 (Sars-CoV-2) However, there are no specific antiviral therapies for COVID-19, using the agents which approved or in development for other viral infections is one of the potentially quickest ways to find treatment for this new viral infection.⁹

Favipiravir is an effective agent that acts as a nucleotide analog that selectively inhibits the viral RNA dependent RNA polymerase or causes lethal mutagenesis upon incorporation into the virus RNA. In view of recent studies and discussion on favipiravir, in this mini review we aimed to summarize the clinical trials studying the efficacy and safety of favipiravir in patients with COVID-19.¹⁰

COVID-19 has led to a major worldwide health and economic crisis, with more than 27 million people having contracted the disease and more than 800,000 deaths. No specific antiviral drugs have been approved for the treatment of COVID-19.¹¹ Favipiravir acts as a purine analogue and is incorporated in place of guanine or adenine and thereby inhibits viral replication. It has been used for treatment of some life-threatening infections such as Ebola, Lassa fever, and rabies, and its therapeutic usefulness has been established in these diseases.¹²

Data about the efficacy of favipiravir in the treatment of COVID-19 are very scarce. Therefore, the aim of the study was to evaluate the efficacy of favipiravir in treatment COVID-19

Data Collected

Group-A	Group-B	Group-C
Corticosteroids	Favipirivir	Remidesivir
20 Patients	10 Patients	10 Patients

Observations

Following Data has been collected and observations has been made such as out of 40 patients studied total, 20 patients treated with corticosteroids and 10

has been treated with Favipiravir and remaining 10 has been treated with Remidesivir.

Conclusions

The patients treated with Corticosteroids, favipiravir and Remedisivir as stated above has been analyzed and found that there were much significant statistical variation in the patients treated with above drugs either in the hospitalization and symptoms such as fever, cough, and respiratory distress.¹³ The study may need to be conducted on large group of sample size for further understanding and variables.

References

- 1. Abd-Elsalam S, Esmail ES, Khalaf M et al (2020) Tanta protocol for management of COVID-19. Perspectives from a developing country. Endocr Metab Immune Disord Drug Targets. https://doi.org/10.2174/1871530320999201117142305.
- Xie M, Chen Q (2020) Insight into 2019 novel coronavirus—an updated intrim review and lessons from SARS-CoV and MERS-CoV. Int J Infect Dis. https://doi.org/10.1016/j.ijid.2020.03.071 Marjot T, Moon AM, Cook JA et al (2020) Outcomes following SARS-CoV-2 infection in patients with chronic liver disease: an international registry study. J Hepatol. https://doi.org/10.1016/j.jhep.2020.09.024.
- Cai Q, Yang M, Liu D et al (2020) Experimental treatment with favipiravir for COVID-19: an openlabel control study. Engineering (Beijing). https:// doi.org/10.1016/j.eng.2020.03.007.
- 4. Faul F, Erdfelder E, Lang A-G et al (2007) A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods 39:175–191.

- 5. World Health Organization. Coronavirus disease (COVID-19) situation report—139. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200607-covid-19-sitrep-139.pdf?sfvrsn=79dc6d08_2. Accessed 8 June 2020.
- Oestereich L, Lüdtke A, Wurr S et al (2014) Successful treatment of advanced Ebola virus infection with T-705 (favipiravir) in a small animal model. Antiviral Res 105:17–21.
- Madelain V, Oestereich L, Graw F et al (2015) Ebola virus dynamics in mice treated with favipiravir. Antiviral Res 123:70–77.
- Noda A, Shirai T, Nakajima H et al (2020) Case report: two cases of COVID-19 pneumonia including use of favipiravir. The Japanese Association for Infectious Diseases. http://www.kansensho.or.jp/uploads/ files/topics/2019ncov/covid19_casereport_ en_200408_2.pdf
- 9. Yokoyama K, Oguri T, Kato A et al (2020) Case report a case of COVID-19 pneumonia that did not worsen and was relieved by early administration of favipiravir and ciclesonide. http://www.kansensho.or.jp/uploads/files/topics/2019ncov/covid19_casereport_en_200406.pdf.
- Abena PM et al (2020) Chloroquine and hydroxych loroquine for the prevention or treatment of COVID-19 in Africa: caution for inappropriate offlabel use in healthcare settings. Am J Trop Med Hyg 102:1184–1188.
- 11. Furuta Y et al (2005) Mechanism of action of T-705 against influenza virus. Antimicrob Agents Chemother. 49:981–986.
- 12. Irie K, Nakagawa A, Fujita H et al (2020) Pharma cokinetics of favipiravir in critically Ill patients with COVID-19. Clin Transl Sci. 13(5):880–885.
- Doi K, Ikeda M, Hayase N et al (2020) Nafamostat mesylate treatment incombination with favipiravir for patients critically ill with Covid-19: a case series. Crit Care 24:39.



SUBSCRIPTION FORM

I want to renew/subscribe international class journal "Gastroenterology International" of Red Flower Publication Pvt. Ltd.

Subscription Rates:

• Institutional: INR 6500 / USD 508

Name and complete address (in capitals):

Payment detail:

Online payment link: http://rfppl.co.in/payment.php?mid=15

Cheque/DD: Please send the US dollar check from outside India and INR check from India made payable to 'Red Flower Publication Private Limited'. Drawn on Delhi branch.

Wire transfer/NEFT/RTGS:

Complete Bank Account No. 604320110000467 Beneficiary Name: Red Flower Publication Pvt. Ltd. Bank & Branch Name: Bank of India; Mayur Vihar

MICR Code: 110013045 Branch Code: 6043

IFSC Code: BKID0006043 (used for RTGS and NEFT transactions)

Swift Code: BKIDINBBDOS

Term and condition for supply of journals

- 1. Advance payment required by Demand Draft payable to **Red Flower Publication Pvt. Ltd.** payable at **Delhi.**
- 2. Cancellation not allowed except for duplicate payment.
- 3. Agents allowed 12.5% discount.
- 4. Claim must be made within six months from issue date.

Mail all orders to

Subscription and Marketing Manager Red Flower Publication Pvt. Ltd. 48/41-42, DSIDC, Pocket-II Mayur Vihar Phase-I

Delhi - 110 091(India)

Phone: 91-11-79695648, Cell: +91-9821671871

E-mail: info@rfppl.co.in

Gastroenterology International

Library Recommendation Form

If you would like to recommend this journal to your library, simply complete the form below and return it to us. Please type or print the information clearly. We will forward a sample copy to your library, along with this recommendation card.

Please send a sample copy to:

Name of Librarian

Name of Library

Address of Library

Recommended by:

Your Name/ Title

Department

Address

Dear Librarian,

I would like to recommend that your library subscribe to the **Gastroenterology International**. I believe the major future uses of the journal for your library would provide:

- 1. useful information for members of my specialty.
- 2. an excellent research aid.
- 3. an invaluable student resource.

I have a personal subscription and understand and appreciate the value an institutional subscription would mean to our staff.

Should the journal you're reading right now be a part of your University or institution's library? To have a free sample sent to your librarian, simply fill out and mail this today!

Stock Manager

Red Flower Publication Pvt. Ltd.

48/41-42, DSIDC, Pocket-II

Mayur Vihar Phase-I

Delhi - 110 091(India)

Phone: 91-11-79695648, Cell: +91-9821671871

E-mail: info@rfppl.co.in

Instructions to Authors

Submission to the journal must comply with the Guidelines for Authors. Non-compliant submission will be returned to the author for correction.

To access the online submission system and for the most up-to-date version of the Guide for Authors please visit:

http://www.rfppl.co.in

Technical problems or general questions on publishing with **GI** are supported by Red Flower Publication Pvt. Ltd.'s Author Support team (http://rfppl.co.in/article_submission_system.php?mid=5#)

Alternatively, please contact the Journal's Editorial Office for further assistance.

Editorial Manager

Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi - 110 091(India).
Mobile: 9821671871, Phone: 91-11-79695648

E-mail: author@rfppl.co.in

Acute Abdomen Unusual Presentation of Pancreatitis: Late Rise of Serum Amylase than the CTSI of Balthazar Scoring

Mayank Chugh¹, Satender Tanwar², Jaideep Bagri³

How to cite this article:

Mayank Chugh, Satender Tanwar, Jaideep Bagri/ Acute Abdomen Unusual Presentation of Pancreatitis: Late Rise of Serum Amylase than the CTSI of Balthazar Scoring/Gastroenterology International. 2021;6(1-2):23-25.

Abstract

Acute abdomen is considered as the high level of suspicion and high index of clinical exposure with judicious examination and relevant investigations, none of the one can masters in all. It all requires the judicious use of the all the things together to bring out the best in the provisional diagnosis and best in the interest of the sick presented in emergency room with limited history and blood investigation carried out by practitioner at the different place. Sometimes the things will be made more complicated when the diagnosis and blood investigation doesn't matches even with the radiological investigations.

This text has been designed to explain the importance of each other with each one in the better and contained manner to help the learner and the medical students those who are wish to work in emergency field and the emergency arrives with young gentleman with acute abdomen. The case discussed here is the live example of combination and importance of the altogether.

Keywords: Acute Abdomen; Balthazar Scoring; Pancreatitis; Serum Amylase.

Introduction

Acute Abdomen Vs Acute Pancreatitis along with relevant investigations: Acute abdomen is a condition that demands urgent attention and treatment. The acute abdomen may be caused by an infection, inflammation, vascular occlusion, or obstruction. The patient will usually present with sudden onset of abdominal pain with associated nausea or vomiting. An acute abdomen refers to a sudden, severe abdominal pain. It is in many cases

Author Affiliation: ¹Gastroenterologist, ²Associate Consultant, ³CMO, COVID Incharge, Department of Gastroenterology, Chugh Multispecialty Hospital, Bhiwani 127021, Haryana, India.

Corresponding Author: Satender Tanwar, ²Associate Consultant, Department of Gastroenterology, Chugh Multispecialty Hospital, Bhiwani 127021, Haryana, India.

E-mail: drsatendertanwar@gmail.com

Received on: 07.02.2022 **Accepted on:** 28.02.2022

a medical emergency, requiring urgent and specific diagnosis. Several causes need immediate surgical treatment.

Acute pancreatitis means inflammation of the pancreas that develops quickly. The main symptom is tummy (abdominal) pain. It usually settles in a few days but sometimes it becomes severe and very serious. The most common causes of acute pancreatitis are gallstones and drinking a lot of alcohol.

The enzyme marker of pancreas determine (1) the incidence and magnitude of elevation in admission serum amylase and lipase levels in extra pancreatic etiologies of acute abdominal pain, and (2) the test most closely associated with the diagnosis of acute pancreatitis. Both serum amylase and lipase elevations were positively associated with a correct diagnosis of acute pancreatitis (P < 0.001) with diagnostic efficiencies of 91 and 94 percent, respectively. A close correlation between elevation of admission serum amylase and lipase

was observed (r = 0.87) in both extra pancreatic and pancreatic disease processes. Serum amylase and lipase levels may be elevated in non pancreatic disease processes of the abdomen. Significant elevations (greater than three times upper limit of normal) in either enzyme are uncommon in these disorders. The strong correlation between elevations in the two serum enzymes in both pancreatic and extra pancreatic etiologies of abdominal pain makes them redundant measures. Serum lipase is a better test than serum amylase either to exclude or to support a diagnosis of acute pancreatitis.

The CT severity index is the sum of the scores obtained with the Balthazar score and those obtained with the evaluation of pancreatic necrosis: 0-3: mild acute pancreatitis. 4-6: moderate acute pancreatitis. 7-10: severe acute pancreatitis.

The CT severity index (CTSI) is based on findings from an enhanced CT scan to assess the severity of acute pancreatitis. The severity of acute pancreatitis CT findings has been found to correlate well with clinical indices of severity.

CT Severity Index Grading of Pancreatitis (Balthazar Score)

- A: Normal Pancreas: 0
- B: Enlargement of Pancreas: 1
- C: Inflammatory changes in Pancreas and Peripancreatic fat: 2
- D: Ill-defined single Peripancreatic fluid collection: 3
- E: Two or more poorly Defined Peripancreatic fluid Collections: 4

Pancreatic necrosis

- None: 0
- ≤30%: 2
- >30-50%: 4
- >50%: 6

Treatment and Prognosis: The CT severity index is the sum of the scores obtained with the Balthazar score and those obtained with the evaluation of pancreatic necrosis:

- 0-3: Mild acute Pancreatitis.
- 4-6: Moderate acute Pancreatitis.
- 7-10: Severe acute Pancreatitis.

Case Discussion

A young male with no comorbid earlier with sudden onset of epigastric and chest pain evaluated by cardiologist at nearest scope available for the patient found to have raised TLC 17.4 cells/ Cumm3 and with normal electrocardiography, Ultrasonography found to have Hepatomegaly. The patient later refer to gastroenterologist for the evaluation.

On Arrival in Emergency the Patient Evaluated

- Afebrile
- Normotensive.
- No respiratory distress.
- Complaint of Epigastric pain abdomen.
 - ✓ On Examination P/A Epigastric Tenderness with Rebound in Right Lower Quadrant / Mc Burney Tenderness ?? Appendicitis.
 - ✓ CVS S1 & S2 Normal.
 - ✓ Respiratory Bilateral Equal Air Entry.
 - ✓ Routine Investigation Sent Patient Kept NPO. Serum Amylase was Normal, Leukocytosis (15.6), Thrombocytopenia (1.23 lakh) with Other parameter normal. NCCT abdomen was planned as the USG was normal on Same day To Rule out Appendicitis as it was Strongly Suspected.
 - ✓ NCCT S/O Acute Pancreatitis with Fat Stranding with Severity score 3.
 - ✓ Patient Kept NPO, RT Aspiration and Broad Spectrum antibiotics and Analgesic.
 - ✓ On day 2 Serum Amylase was repeated and found to have Raised Amylase 443 IU/l with Decreased Platelet to 0.93 L.
 - ✓ Patient passed flatus with bilious fluid in aspirated bag, Soft abdomen and symptomatically improving.

Conclusion

The case Discussed here is suggestive of Acute abdomen is magic box, patient diagnosed timely saves many organs before landing into MODS. The case discussed of young man suggestive of nothing sometimes contributory in acute abdomen, A clinician dealing with acute abdomen must open window from all sided not to miss the pathology on day of arrival and successive days.

Acute pancreatitis might have normal serum amylase on Day 1 but rises subsequent, RLQ (right Lower quadrant tenderness and Raised TLC may not always be appendicitis to rule out by USG/CT Abdomen. Decision are no longer when the surgical need arrives of diagnostic laparoscopy if everything comes non significant in a persisting pain abdomen patients.

References

- Harrison's Principles of Internal Medicine, 20th edition J. Larry Jameson, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo, Joseph Loscalzo.
- 2. Davidson's Principles and Practice of Medicine International Edition.
- 3. Textbook of Physical Diagnosis: History and

- Examination With Student Consult Online Access [Textbook of Physical Diagnosis (Swartz)].
- 4. Yamada' s Textbook of GastroenterologyDaniel K. Podolsky MD,, Michael Camilleri MD,, J. Gregory Fitz MD FAASLD,, Anthony N. Kalloo MD,, Fergus Shanahan MD,, Timothy C. Wang MD,
- 5. European Journal of Gastroenterology & Hepatology.



REDKART.NET

(A product of RF Library Services (P) Limited) (Publications available for purchase: Journals, Books, Articles and Single issues) (Date range: 1967 to till date)

The Red Kart is an e-commerce and is a product of RF Library Services (P) Ltd. It covers a broad range of journals, Books, Articles, Single issues (print & Online-PDF) in English and Hindi languages. All these publications are in stock for immediate shipping and online access in case of online.

Benefits of shopping online are better than conventional way of buying.

- 1. Convenience.
- 2. Better prices.
- 3. More variety.
- 4. Fewer expenses.
- 5. No crowds.
- 6. Less compulsive shopping.
- 7. Buying old or unused items at lower prices.
- 8. Discreet purchases are easier.

URL: www.redkart.net

Subject Index

Title	Page No
Acute Abdomen Unusual Presentation of Pancreatitis: Late Rise of Serum	
Amylase than the CTSI of Balthazar Scoring	23
Recovery Rate and Hospitalization Stay Patient Treated with Corticosteroids	
Alone, Along with Antiviral Oral and Intravenous: Faviparavir & Remdesivir:	
40 Patients Clinical study	17
Single Time EUS Guided Aspiration of Caudate Lobe Abscess is less Painful	9



Author Index

Name	Page No	Name	Page No
Mayank Chugh	23	Satender Tanwar	17
Satender Tanwar	23	Viswanath Reddy Donapati	9
Jaideep Bagri	23	Guduru R Srinivas Rao	9
Mayank Chugh	17	Ravishankar Bagepally	9



Guidelines for Authors

Manuscripts must be prepared in accordance with "Uniform requirements for Manuscripts submitted to Biomedical Journal" developed by international committee of medical Journal Editors

Types of Manuscripts and Limits

Original articles: Up to 3000 words excluding references and abstract and up to 10 references.

Review articles: Up to 2500 words excluding references and abstract and up to 10 references.

Case reports: Up to 1000 words excluding references and abstract and up to 10 references.

Online Submission of the Manuscripts

Articles can also be submitted online from http://rfppl.co.in/customer_index.php.

- I) First Page File: Prepare the title page, covering letter, acknowledgement, etc. using a word processor program. All information which can reveal your identity should be here. use text/rtf/doc/PDF files. Do not zip the files.
- 2) Article file: The main text of the article, beginning from Abstract till References (including tables) should be in this file. Do not include any information (such as acknowledgement, your name in page headers, etc.) in this file. Use text/rtf/doc/PDF files. Do not zip the files. Limit the file size to 400 Kb. Do not incorporate images in the file. If file size is large, graphs can be submitted as images separately without incorporating them in the article file to reduce the size of the file.
- 3) Images: Submit good quality color images. Each image should be less than 100 Kb in size. Size of the image can be reduced by decreasing the actual height and width of the images (keep up to 400 pixels or 3 inches). All image formats (jpeg, tiff, gif, bmp, png, eps etc.) are acceptable; jpeg is most suitable.

Legends: Legends for the figures/images should be included at the end of the article file.

If the manuscript is submitted online, the contributors' form and copyright transfer form has to be submitted in original with the signatures of all the contributors within two weeks from submission. Hard copies of the images (3 sets), for articles submitted online, should be sent to the journal office at the time of submission of a revised manuscript. Editorial office: Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi – 110 091, India, Phone: 91-11-79695648, Cell: +91-9821671871. E-mail: author@rfppl.co.in. Submission page: http://rfppl.co.in/article_submission_system.php?mid=5.

Preparation of the Manuscript

The text of observational and experimental articles should be divided into sections with the headings: Introduction, Methods, Results, Discussion, References, Tables, Figures, Figure legends, and Acknowledgment. Do not make subheadings in these sections.

Title Page

The title page should carry

- Type of manuscript (e.g. Original article, Review article, Case Report)
- The title of the article should be concise and informative;
- 3) Running title or short title not more than 50 characters;
- 4) The name by which each contributor is known (Last name, First name and initials of middle name), with his or her highest academic degree(s) and institutional affiliation;
- 5) The name of the department(s) and institution(s) to which the work should be attributed;
- 6) The name, address, phone numbers, facsimile numbers and e-mail address of the contributor responsible for correspondence about the manuscript; should be mentoined.
- The total number of pages, total number of photographs and word counts separately for abstract and for the text (excluding the references and abstract);
- 8) Source(s) of support in the form of grants, equipment, drugs, or all of these;
- 9) Acknowledgement, if any; and
- 10) If the manuscript was presented as part at a meeting, the organization, place, and exact date on which it was read.

Abstract Page

The second page should carry the full title of the manuscript and an abstract (of no more than 150 words for case reports, brief reports and 250 words for original articles). The abstract should be structured and state the Context (Background), Aims, Settings and Design, Methods and Materials, Statistical analysis used, Results and Conclusions. Below the abstract should provide 3 to 10 keywords.

Introduction

State the background of the study and purpose of the study and summarize the rationale for the study or observation.

Methods

The methods section should include only information that was available at the time the plan or protocol for the study was written such as study approach, design, type of sample, sample size, sampling technique, setting of the study, description of data collection tools and methods; all information obtained during the conduct of the study belongs in the Results section.

Reports of randomized clinical trials should be based on the CONSORT Statement (http://www.consort-statement.org). When reporting experiments on human subjects, indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional or regional) and with the Helsinki Declaration of 1975, as revised in 2000 (available at http://www.wma.net/e/policy/17-c_e.html).

Results

Present your results in logical sequence in the text, tables, and illustrations, giving the main or most important findings first. Do not repeat in the text all the data in the tables or illustrations; emphasize or summarize only important observations. Extra or supplementary materials and technical details can be placed in an appendix where it will be accessible but will not interrupt the flow of the text; alternatively, it can be published only in the electronic version of the journal.

Discussion

Include summary of key findings (primary outcome measures, secondary outcome measures, results as they relate to a prior hypothesis); Strengths and limitations of the study (study question, study design, data collection, analysis and interpretation); Interpretation and implications in the context of the totality of evidence (is there a systematic review to refer to, if not, could one be reasonably done here and now?, What this study adds to the available evidence, effects on patient care and health policy, possible mechanisms)? Controversies raised by this study; and Future research directions (for this particular research collaboration, underlying mechanisms, clinical

research). Do not repeat in detail data or other material given in the Introduction or the Results section.

References

List references in alphabetical order. Each listed reference should be cited in text (not in alphabetic order), and each text citation should be listed in the References section. Identify references in text, tables, and legends by Arabic numerals in square bracket (e.g. [10]). Please refer to ICMJE Guidelines (http://www.nlm.nih.gov/bsd/uniform_requirements.html) for more examples.

Standard journal article

[1] Flink H, Tegelberg Å, Thörn M, Lagerlöf F. Effect of oral iron supplementation on unstimulated salivary flow rate: A randomized, double-blind, placebo-controlled trial. J Oral Pathol Med 2006; 35: 540–7.

[2] Twetman S, Axelsson S, Dahlgren H, Holm AK, Källestål C, Lagerlöf F, et al. Caries-preventive effect of fluoride toothpaste: A systematic review. Acta Odontol Scand 2003; 61: 347–55.

Article in supplement or special issue

[3] Fleischer W, Reimer K. Povidone-iodine antisepsis. State of the art. Dermatology 1997; 195 Suppl 2: 3–9.

Corporate (collective) author

[4] American Academy of Periodontology. Sonic and ultrasonic scalers in periodontics. J Periodontol 2000; 71: 1792–801.

Unpublished article

[5] Garoushi S, Lassila LV, Tezvergil A, Vallittu PK. Static and fatigue compression test for particulate filler composite resin with fiber-reinforced composite substructure. Dent Mater 2006.

Personal author(s)

[6] Hosmer D, Lemeshow S. Applied logistic regression, 2nd edn. New York: Wiley-Interscience; 2000.

Chapter in book

[7] Nauntofte B, Tenovuo J, Lagerlöf F. Secretion and composition of saliva. In: Fejerskov O,

Kidd EAM, editors. Dental caries: The disease and its clinical management. Oxford: Blackwell Munksgaard; 2003. pp 7-27.

No author given

[8] World Health Organization. Oral health surveys - basic methods, 4th edn. Geneva: World Health Organization; 1997.

Reference from electronic media

[9] National Statistics Online – Trends in suicide by method in England and Wales, 1979–2001. www. statistics.gov.uk/downloads/theme_health/HSQ 20.pdf (accessed Jan 24, 2005): 7–18. Only verified references against the original documents should be cited. Authors are responsible for the accuracy and completeness of their references and for correct text citation. The number of reference should be kept limited to 20 in case of major communications and 10 for short communications.

More information about other reference types is available at www.nlm.nih.gov/bsd/uniform_requirements.html, but observes some minor deviations (no full stop after journal title, no issue or date after volume, etc.).

Tables

Tables should be self-explanatory and should not duplicate textual material.

Tables with more than 10 columns and 25 rows are not acceptable.

Table numbers should be in Arabic numerals, consecutively in the order of their first citation in the text and supply a brief title for each.

Explain in footnotes all non-standard abbreviations that are used in each table.

For footnotes use the following symbols, in this sequence: *, \P , †, ‡‡,

Illustrations (Figures)

Graphics files are welcome if supplied as Tiff, EPS, or PowerPoint files of minimum 1200x1600 pixel size. The minimum line weight for line art is 0.5 point for optimal printing.

When possible, please place symbol legends below the figure instead of the side.

Original color figures can be printed in color at the editor's and publisher's discretion provided the author agrees to pay. Type or print out legends (maximum 40 words, excluding the credit line) for illustrations using double spacing, with Arabic numerals corresponding to the illustrations.

Sending a revised manuscript

While submitting a revised manuscript, contributors are requested to include, along with single copy of the final revised manuscript, a photocopy of the revised manuscript with the changes underlined in red and copy of the comments with the point-to-point clarification to each comment. The manuscript number should be written on each of these documents. If the manuscript is submitted online, the contributors' form and copyright transfer form has to be submitted in original with the signatures of all the contributors within two weeks of submission. Hard copies of images should be sent to the office of the journal. There is no need to send printed manuscript for articles submitted online.

Reprints

Journal provides no free printed, reprints, however a author copy is sent to the main author and additional copies are available on payment (ask to the journal office).

Copyrights

The whole of the literary matter in the journal is copyright and cannot be reproduced without the written permission.

Declaration

A declaration should be submitted stating that the manuscript represents valid work and that neither this manuscript nor one with substantially similar content under the present authorship has been published or is being considered for publication elsewhere and the authorship of this article will not be contested by any one whose name(s) is/are not listed here, and that the order of authorship as placed in the manuscript is final and accepted by the co-authors. Declarations should be signed by all the authors in the order in which they are mentioned in the original manuscript. Matters appearing in the Journal are covered by copyright but no objection will be made to their reproduction provided permission is obtained from the Editor prior to publication and due acknowledgment of the source is made.

Approval of Ethics Committee

We need the Ethics committee approval letter from an Institutional ethical committee (IEC) or an institutional review board (IRB) to publish your Research article or author should submit a statement that the study does not require ethics approval along with evidence. The evidence could either be consent from patients is available and there are no ethics issues in the paper or a letter from an IRB stating that the study in question does not require ethics approval.

Abbreviations

Standard abbreviations should be used and be spelt out when first used in the text. Abbreviations should not be used in the title or abstract.

Checklist

- Manuscript Title
- Covering letter: Signed by all contributors
- Previous publication/ presentations mentioned, Source of funding mentioned
- Conflicts of interest disclosed

Authors

- Middle name initials provided.
- Author for correspondence, with e-mail address provided.
- Number of contributors restricted as per the instructions.
- Identity not revealed in paper except title page (e.g. name of the institute in Methods, citing previous study as 'our study')

Presentation and Format

- Double spacing
- Margins 2.5 cm from all four sides
- Title page contains all the desired information. Running title provided (not more than 50 characters)
- Abstract page contains the full title of the manuscript
- Abstract provided: Structured abstract provided for an original article.
- Keywords provided (three or more)
- Introduction of 75-100 words

- Headings in title case (not ALL CAPITALS).
 References cited in square brackets
- References according to the journal's instructions

Language and grammar

- Uniformly American English
- Abbreviations spelt out in full for the first time.
 Numerals from 1 to l0 spelt out
- Numerals at the beginning of the sentence spelt out

Tables and figures

- No repetition of data in tables and graphs and in text.
- Actual numbers from which graphs drawn, provided.
- Figures necessary and of good quality (color)
- Table and figure numbers in Arabic letters (not Roman).
- Labels pasted on back of the photographs (no names written)
- Figure legends provided (not more than 40 words)
- Patients' privacy maintained, (if not permission taken)
- Credit note for borrowed figures/tables provided
- Manuscript provided on a CDROM (with double spacing)

Submitting the Manuscript

- Is the journal editor's contact information current?
- Is the cover letter included with the manuscript?
 Does the letter:
- 1. Include the author's postal address, e-mail address, telephone number, and fax number for future correspondence?
- 2. State that the manuscript is original, not previously published, and not under concurrent consideration elsewhere?
- 3. Inform the journal editor of the existence of any similar published manuscripts written by the author?
- Mention any supplemental material you are submitting for the online version of your article. Contributors' Form (to be modified as applicable and one signed copy attached with the manuscript)