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# Gas-forming Pyogenic Liver Abscess in an Immuno Competent Young Adult Male

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## 1. Introduction

Gas-forming PLA (GPLA) is less common, accounting for 7%–24% of all PLA.Poor glycemic control has been linked to a higher likelihood of gas-forming PLA.The organism most commonly associated with both PLA and GPLA is the Klebsiella.

Mortality rates throughout the mid 20th century remained high at 60-80%. With advances in diagnostic and therapeutic radiology, coupled with improvements in microbiological identification and therapy mortality rates decreased to 5-30%.

## 2. History

34-year male, came with a compliant of fever since 10 days

Abdominal pain since 10 days

Fever high grade, associated with chills and rigor, continuous fever associated with abdominal pain more on right side associated with generalized weakness and anorexia.

He had a similar complain of pain abdomen two and a half month back when ultrasound scan of abdomen was done, suggestive of acute cholelithiasis(stones <10mm in diameter) and liver abscess(partially liquifed).

He was treated conservatively and discharged after 5 days with advise to continue oral antibiotics for 4 wks. Patient remained symptom free till he presented to us during the intervening period.

## 3. Examination

At the pulse 116 beats/min, blood pressure 80/50mmHg, pallor + and jaundice +

His abdomen was soft , non-distended, with tender hepatomegaly (liver span-21 cms)

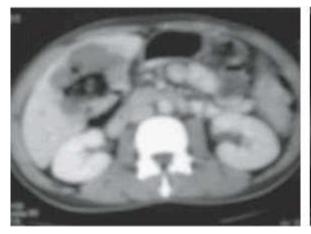
## 4. Investigations

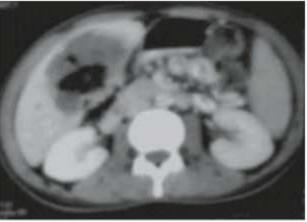
Virals: non reactive

Investigations showed hb-7.3gm/dl TC- 35,200 cells/cumm, with predominant neutrophilia LFT- total bilirubin-11.2 mg/dl Direct bilirubin- 7.3 mg/dl Indirect bilirubin- 3.9 mg/dl ALT-398 IU/L AST-360 IU/L Fasting blood glucose=89 mg/dl Post prandial glucose=93 mg/dlprothrombin time 27.8 seconds, INR – 2.3

Ultrasonography showed large gas forming liver abscess of  $4 \times 5.5$  cm in right lobe of liver, confirmed by CT abdomen Usg guided pus aspiration was done about 90 ml of pus is drained and pig tail cather was introduced into the abscess pus culture and blood culture grew klebsiella species sensitive to piperacillintazobactum

imipnem amikacin metronidazole





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#### 5. Treatment

Patient was managed with broad spectrum antibiotics (tazobactumpippercillin and metronidazole). On 5th day of admission patients BP dropped to 70/50 mmHg, probably in septic shock and his condition was doomed unfit for any surgical intervention. He was intubated and kept him on inotropic support. He developed multiorgan dysfunction syndrome and eventually succumbed on 9th day of admission in intensive care unit despite aggressive resuscitative measures.

### 6. Conclusion

This case highlights that GPLA can also occur in patients who are non-diabetic. These patients are often sicker and require urgent drainage of the abscess. It is very important to perform imaging studies early to reach a diagnosis, as GPLA is still associated with a high mortality.

#### References

- [1] Gas-forming pyogenic liver abscess. Chong VH, Yong AM, Wahab AY
- [2] Ruiz-Hernández JJ, León-Mazorra M, Conde-Martel A, et al: Pyogenic liver abscesses: mortality-related factors. Eur J GastroenterolHepatol 2007
- [3] Gas forming liver abscess caused by Klebsiellapneumoniae. Lin JN, Chen YH, Lai CH, Huang CK, Wang JL, Chung HC, Liang SH, Lin HH BMJ Case Rep January 1, 2009.
- [4] Fatal gas-forming pyogenic liver abscess due to Klebsiellapneumoniae. Zhang Y, Zang GQ, Tang ZH, Yu YS Rev. Inst. Med. Trop. Sao Paulo March 1, 2013; 55 (2); 144.
- [5] Lee K, Wong S, Sheen P. Pyogenic liver abscess: an audit of 10 years' experience and analysis of risk factors. Dig Surg2001;18(6):459–465; discussion 465–466.
- [6] Lederman ER, Crum NF. Pyogenic liver abscess with a focus on Klebsiellapneumoniae as a primary pathogen: an emerging disease with unique clinical characteristics. Am J Gastroenterol 2005;100(2):322–331.
- [7] Pope J, Teich D, Clardy P, McGillicuddy D. Klebsiellapneumoniae liver abscess: an emerging problem in North America. J Emerg Med doi:10.1016/j.jemermed.2008.04.041. Published online November 10, 2008. Accessed June 15, 2010.
- [8] Mortelé KJ, Segatto E, Ros PR. The infected liver: radiologic-pathologic correlation. RadioGraphics 2004;24(4):937–955.
- [9] Brown KT, Gandhi RT, Covey AM, Brody LA, Getrajdman GI. Pylephlebitis and liver abscess mimicking hepatocellular carcinoma. HepatobiliaryPancreat Dis Int 2003;2(2):221–225.
- [10] Lee KH, Han JK, Jeong JY, et al.. Hepatic attenuation differences associated with obstruction of the portal or hepatic veins in patients with hepatic abscess. AJR Am J Roentgenol 2005;185(4):1015–1023.
- [11] Syed MA, Kim TK, Jang HJ. Portal and hepatic vein thrombosis in liver abscess: CT findings. Eur J Radiol 2007;61(3):513–519.

- [12] Maffiolo C, Novellas S, Chevallier P, Brunner P, Mourou MY, Bruneton JN. Thrombophlebitis of the hepatic veins: complication of a Klebsiella liver abscess. Clin Imaging 2006;30(1):63–65.
- [13] Wang JH, Liu YC, Lee SS, et al.. Primary liver abscess due to Klebsiellapneumoniae in Taiwan. Clin Infect Dis 1998;26(6):1434–143.
- [14] Hui JY, Yang MK, Cho DH, et al.. Pyogenic liver abscesses caused by Klebsiellapneumoniae: US appearance and aspiration findings. Radiology 2007;242(3):769–776.
- [15] Lau YJ, Hu BS, Wu WL, Lin YH, Chang HY, Shi ZY. Identification of a major cluster of Klebsiellapneumoniae isolates from patients with liver abscess in Taiwan. J ClinMicrobiol 2000;38(1):412–414.

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