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The symposium on hepatic abscess: Controversy, analysis and addendum

Well chosen Liver Abscess (LA) topic was started with controversy on incidences. “LA is relatively uncommon in western countries” without any literature evidence in the introduction and “increasing trend of Pyogenic Liver Abscess (PLA) and Amoebic Liver Abscess (ALA)” in demography¹ are contradictory.

Differential diagnosis – Article gives same presentation and incidence of jaundice both ALA and PLA without any literature evidence.¹ Patients with ALA were more likely to be young males with a larger, solitary, right lobe abscess. Univariate analysis found patients with PLA more likely to be >50 years old, with a history of diabetes and jaundice, with pulmonary findings, multiple abscesses, amoebic serology titers <1:256 IU, and lower levels of serum albumin.² Low incidence of ALA in reproductive females is well documented in books.

Classification of PLA – Classification is done for the treatment or prognostication. A study with over 600 cases, PLA, they have divided into A. cryptogenic 152 (25.3%) B. Diabetic-229 (38.1%), C. Biliary tract diseases-144 (24%) D. mixed .76 (12.6%) and found biliary cause having maximum recurrence over a mean follow-up 6.06 years.³

Cryptogenic PLA – This group of PLA may herald the onset of cancer, especially hepato-biliary and colon cancer.^{4,5} Elevated AFP and CA19-9 could suggest liver cancer and intra-hepatic cholangiocarcinoma in cases of PLA. Contrast-enhanced computed tomography could be helpful in patients with normal AFP and CA19-9.⁶

Diabetic – Diabetes is a strong, potentially modifiable risk factor for PLA and is associated with a poor prognosis⁷ The pathogens in DM is mostly due to *Klebsiella pneumoniae* K1 strain carrying the virulence plasmid gives rise to recurrent PLA.^{8,9}

Biliary cause – Underlying biliary tract disease commonest cause of recurrent abscess Irrespective of DM or cryptogenic status and *Escherichia coli* is mostly the causative organism.³ PLA in presence biliary obstruction requires urgent biliary-enteric continuity. Endoscopic therapy is an effective mode of treatment for biliary fistulas complicating liver abscesses.¹⁰ While percutaneous drainage is appropriate as first-line surgical treatment in most cases, Percutaneous drainage may help to optimize clinical condition prior to surgery. Open surgical drainage is prudent in cases of rupture, multi-loculation, associated biliary or intra-abdominal pathology

Laparoscopic drainage is a feasible surgical option with promising results in the future. Liver resection is reserved for concomitant localized intra-hepatic disease and tumor, after control of sepsis.¹¹ Laparoscopic surgery for simultaneous treatment of PLA and biliary pathology is feasible in selected patients and the therapeutic effect is similar to that of open surgery.¹² The authors have listed all the types of therapy without giving the need in specific situation.

ALA – Serodiagnosis in the endemic area remains doubtful due to, high antibody titers. Two new tests pyruvate phosphate dikinase¹³ and parasite DNA demonstration in saliva are useful in such situation.¹⁴ A US Food and Drug Administration approved drug used for rheumatoid arthritis, “*Auranofin*” is found to be 10 times more active than Metronidazole against parasite.¹⁵

The references are rather old and Ref. 26 and 29 are incomplete as per MJAfi guideline.

REFERENCES

1. Rajagopalan S, Langer V. Symposium – Hepatic abscess. *MJAfi*. 2012;68:271–275.
2. Lodhi S, Sarwari AR, Muzammil M, Salam A, Smego RA. Features distinguishing amoebic from pyogenic liver abscess: a review of 577 adult cases. *Trop Med Int Health*. 2004;9:718–723. PMID: 15189463.
3. Cheng HC, Chang WL, Chen WY, Kao AW, Chuang CH, Sheu BS. Long-term outcome of pyogenic liver abscess: factors related with abscess recurrence. *J Clin Gastroenterol*. 2008;42:1110–1115. PMID: 18458641.
4. Kao WY, Hwang CY, Chang YT, et al. Cancer risk in patients with pyogenic liver abscess: a nationwide cohort study. *Aliment Pharmacol Ther*. 2012;36:467–476. PMID: 22779737.
5. Jeong SW, Jang JY, Lee TH, et al. Cryptogenic pyogenic liver abscess as the herald of colon cancer. *J Gastroenterol Hepatol*. 2012;27:248–255. PMID: 21777280.
6. Li C, Li G, Miao R, et al. Primary liver cancer presenting as pyogenic liver abscess: characteristics, diagnosis, and management. *J Surg Oncol*. 2012 Jun 1;105:687–691. PMID:21952992.
7. Thomsen RW, Jepsen P, Sørensen HT. Diabetes mellitus and pyogenic liver abscess: risk and prognosis. *Clin Infect Dis*. 2007;44:1194–1201. PMID:174070380.
8. Fierer J, Walls L, Chu P. Recurring *Klebsiella pneumoniae* pyogenic liver abscesses in a resident of San Diego, California, due to a K1 strain carrying the virulence plasmid. *J Clin Microbiol*. 2011;49:4371–4373. PMID: 21998428.

9. Yang YS, Siu LK, Yeh KM, et al. Recurrent *Klebsiella pneumoniae* liver abscess: clinical and microbiological characteristics. *J Clin Microbiol.* 2009;47:3336–3339. PMID:19692563.
10. Sharma BC, Garg V, Reddy R. Endoscopic management of liver abscess with biliary communication. *Dig Dis Sci.* 2012;57: 524–527. PMID: 21879281.
11. Chung YF, Tan YM, Lui HF, et al. Management of pyogenic liver abscesses - percutaneous or open drainage? *Singapore Med J.* 2007;48:1158–1165. quiz 1165. PMID: 18043848.
12. Tu JF, Huang XF, Hu RY, You HY, Zheng XF, Jiang FZ. Comparison of laparoscopic and open surgery for pyogenic liver abscess with biliary pathology. *World J Gastroenterol.* 2011;17:4339–4343. PMID: 22090791.
13. Wong WK, Tan ZN, Othman N, et al. Analysis of *Entamoeba histolytica* excretory-secretory antigen and identification of a new potential diagnostic marker. *Clin Vaccine Immunol.* 2011; 18:1913–1917. PMID: 21918120.
14. Khairnar K, Parija SC. Detection of *Entamoeba histolytica* DNA in the saliva of amoebic liver abscess patients who received prior treatment with metronidazole. *J Health Popul Nutr.* 2008; 26:418–425. PMID: 19069620.
15. Debnath A, Parsonage D, Andrade RM, et al. A high-throughput drug screen for *Entamoeba histolytica* identifies a new lead and target. *Nat Med.* 2012;18:956–960. PMID: 22610278.

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