



Effectiveness of surgery and percutaneous catheter drainage(PCD) with antibiotics for pyogenic liver abscess patients



¹Meng-Shan Wu ² Shu-Fen Su*

¹ NP, Department of Nursing, Buddhist Taichung Tzu Chi General Hospital, Taiwan, ¹RN,BSc,Graduate student,School of Nursing, Hungkuang University

² RN, PhD, Associate Professor, School of Nursing, Hungkuang University, Taiwan

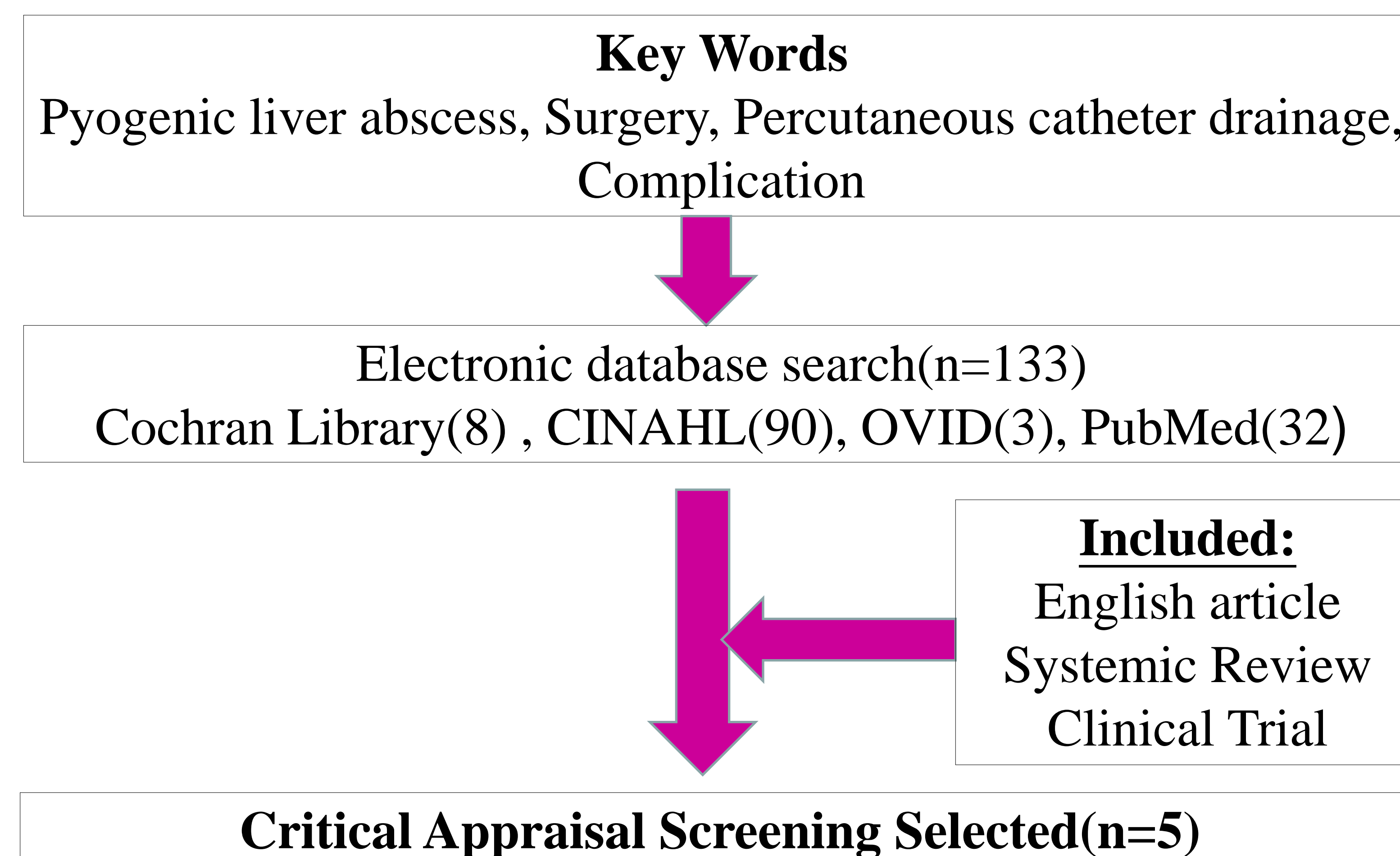
Background

1.Pyogenic liver abscess is a life-threatening disease with high morbidity and mortality rates. In clinical, intra-venous antibiotics with percutaneous catheter drainage has been widely used to take place of surgery.
2.However, which one has better effects is still lack of study.

Objective

Compare the effectiveness of surgery and percutaneous catheter drainage (PCD) with antibiotics for pyogenic liver abscess

Methods



Results

- 1.PCD is more effective than needle aspiration which only has good effects on simple small abscess.
- 2.Significant difference in hospital stays, duration of antibiotics uses, and symptoms relief between these two groups.
- 3.PCD has lower morbidity and costs. Surgery is suitable for patients who failed in PCD.

Conclusions

- 1.PCD and surgery are both effective for pyogenic liver abscess patients.
- 2.Past history, infectious source, pathogen and abscess distribution play importance roles in therapeutic plans.
- 3.Surgery only suits for patients with large>10cm abscesses, or failed in PCD.

References

1. Abusedera, M. A., & El-Badry, A. M. (2014). Percutaneous treatment of large pyogenic liver abscess. *The Egyptian Journal of Radiology and Nuclear Medicine*.45,109-115.
2. Ferraioli, G., Garlaschelli, A., Zanaboni, D., Gulizia, R., Brunetti, E., Tinozzi, F. P., ... & Filice, C. (2008). Percutaneous and surgical treatment of pyogenic liver abscesses: observation over a 21-year period in 148 patients. *Digestive and liver disease*, 40(8), 690-696
3. Heneghan, H. M., Healy, N. A., Martin, S. T., Ryan, R. S., Nolan, N., Traynor, O., & Waldron, R. (2011). Modern management of pyogenic hepatic abscess: a case series and review of the literature. *BMC research notes*, 4(1), 80-87
4. Singh, O., Gupta, S., Moses, S., & Jain, D. K. (2009). Comparative study of catheter drainage and needle aspiration in management of large liver abscesses. *Indian Journal of Gastroenterology*, 28(3), 88-92
5. Singh, S., Chaudhary, P., Saxena, N., Khandelwal, S., Poddar, D. D., & Biswal, U. C. (2013). Treatment of liver abscess: prospective randomized comparison of catheter drainage and needle aspiration. *Annals of Gastroenterology*, 26(3), 1-8.

Author/Country	Level	Characteristics of abscess	Treatment/Cases
Ferraioli et al.(2008) Italy	II	1. Solitary(n=113) 2. Multiple(n=35)	1.Percutaneous drainage(n=104),including PCD (n=13, abscess 8.0 cm)+PNA*(n=91, abscess 4.3 cm), 2.Surgery(n=44, abscess 5.3 cm) * PNA, Percutaneous needle aspiration
Singh et al.(2009) India	I	1. Solitary(n=59) 2. Multiple(n=13)	1.PCD(n=36) with 10 days parenteral antibiotics 2.PNA(n=36) with 10 days parenteral antibiotics Abscess> 10 cm
Heneghan et al.(2011) Ireland	IV	1. Solitary(n=10) 2. Multiple(n=1)	Broad spectrum intravenous antibiotics with percutaneous drainage(n=11)
Singh et al.(2013) India	I	1. Solitary(n=45) 2. Multiple(n=15)	1.PCD(n=30) with 19 days parenteral antibiotics 2.PNA(n=30) with 19 days parenteral antibiotics
Abusedera & El-Badry(2014) Egypt.	I	1. Solitary(n=70) 2. Multiple(n=18)	1.PCD(n=45) with broad spectrum intravenous antibiotics 2.PNA(n=43) with broad spectrum intravenous antibiotics

Corresponding Author

Shu-Fen Su, PhD, MSc, RN

Associate Professor, School of Nursing Hungkuang University, Taiwan

Email: sofei@sunrise.hk.edu.tw, sofe6726@yahoo.com.tw