PROGNOSIS

Traditional Chinese Medicine (Chinese herbal medicine)

Objectives:

At the completion of this unit, participants will be able to assess how trustworthy the results of a cohort study are, and how these results might apply to patient care.
At the completion of this unit you will be able to:

1. Assess the risk of bias of a cohort addressing a question of prognosis.
2. Interpret the measures of effect of the exposure in terms of magnitude, precision, and patient-importance (e.g. HR, NNT, and 95% CI of these measures).
3. Determine the applicability of the results to your patients.
4. Evaluate the trade-offs between benefits and harms of being exposed.

Reference (readings):

Listed chapters (below) in: Guyatt GH, Rennie D, Meade M, Cook DJ. Users' Guides to the Medical Literature: A Manual for Evidence Based Clinical Practice, 3nd Edition, New York, NY: The McGraw-Hill Companies, Inc. 2015.
- The Foundations Chapter 4, P19, What Is the Question?
- Therapy Chapter 20, p.421,
- PrognosisChapter 9, p.87, Does Treatment Lower Risk? Understanding the Results
- Confidence Intervals Chapter 10, p.95, Was the Single Study or Meta-analysis Large Enough?

Problem Based Educational Strategy:

1. Read the Clinical Scenario
2. Compose a well-built clinical (foreground) question about the clinical problem.
3. Read the Users' Guides to the Medical Literature reference articles.
4. Complete the attached Critical appraisal sheet.
5. Decide whether you will recommend Chinese herbal medicine to Dane.

Scenario:

Dane is a 43 years old man who worked in an IT company in Canada as a programmer for nearly 15 years. His parents immigrated from Fujian province, located in the southeast of China to Canada before he was born. He was found to be a hepatitis B virus (HBV) carrier when he was four years old. There was no symptom until 10 months ago. Dane began to feel easily tired, and a loss of appetite for meat and other greasy foods. Occasionally, he even felt distension and slight pain in the hepatic region. So he went to see his doctor, and then was diagnosed to be chronic hepatitis B four months ago. He has been taking Entecavir Tablets (0.5mg per day) for 9 months. His mother has been diagnosed to be hepatocellular carcinoma (HCC) for years and is deteriorating day by day. His symptoms were under control now. And his results of the laboratory tests were generally stable without obvious deterioration. However, he was very worried when he came to visit you. He asked whether you think herbal medicine can work together with entecavir to prevent or delay the development of HCC, since his medical insurance can cover the herbal treatments for his condition.

Since you don't have experience with herbs, you searched PubMed and Clinical Queries, using search terms "chronic hepatitis B" and "prognosis" and "hepatocelluar carcinoma" and "herb*" to see whether there is relevant evidence. You identified the following cohort study exploring associations between prescribed Chinese herbal medicine and risk of HCC in chronic hepatitis B patients.

Tsai T-Y, Livneh H, Hung T-H, et al. Associations between prescribed Chinese herbal medicine and risk of hepatocellular carcinoma in patients with chronic hepatitis B: a nationwide population-based cohort study. BMJ Open 2017;7: e014571. doi:10.1136/bmjopen-2016-014571

After reading the abstract, you think this study might be relevant to Dane's condition. So you decided to read this study, critically appraise it using the "User's Guide" for prognosis, and to see whether Dane could be benefited from CHM treatments or not.

After critically appraising this paper, will you recommend Chinese herbal medicine to Dane?

Enclosed Materials:

Tsai T-Y, Livneh H, Hung T-H, et al. Associations between prescribed Chinese herbal medicine and risk of hepatocellular carcinoma in patients with chronic hepatitis B: a nationwide population-based cohort study. BMJ Open 2017;7: e014571. doi:10.1136/bmjopen-2016-014571