Acute Abdomen – Classic Papers

Sabiston Textbook of Surgery

Little has changed in the technique or goals of history taking since Dr. Zachary Cope first published his classic paper on the diagnosis of acute abdominal pain in 1921. An exception is the application of computers to the so-called art of history taking, which has been extensively studied in Europe. Data were collected by physicians on detailed standardized forms during history and physical examination and entered into computers programmed with a medical database of diseases and their associated signs and symptoms. The computer-generated diagnosis based on mathematical probabilities was as much as 20% more accurate than the diagnosis determined by physicians left to their own methods. Statistically significant improvement was identified in timely laparotomy, shortened hospital stays, and reduced need for surgery and hospitalization. It is interesting and important to note, however, that statistically significant improvement in accuracy and efficiency has been realized without computer assistance when similar standardized forms are used for data collection. This has also been observed in the settings of trauma and critical care.

References 6-11 cited in history paragraph above

6. Silen W: Cope's Early Diagnosis of the Acute Abdomen, 21st ed. New York, Oxford University Press, 2005. Countway Medicine WI 900 S582c 2000

- 7. Paterson-Brown S, Vipond MN: Modern aids to clinical decision-making in the acute abdomen. *Br J Surg* 1990; 77:13-18.
- 8. de Dombal FT: Computers, diagnoses and patients with acute abdominal pain. *Arch Emerg Med* 1992; 9:267-270.
- 9. Adams ID, Chan M, Clifford PC, et al: Computer aided diagnosis of acute abdominal pain: A multicentre study. *Br Med J (Clin Res Ed)* 1986; 293:800-804.
- 10. Wellwood J, Johannessen S, Spiegelhalter DJ: How does computer-aided diagnosis improve the management of acute abdominal pain?. *Ann R Coll Surg Engl* 1992; 74:40-46.
- 11. McAdam WA, Brock BM, Armitage T, et al: Twelve years' experience of computer-aided diagnosis in a district general hospital. *Ann R Coll Surg Engl* 1990; 72:140-146.

Selected References

Ahmad TA, Shelbaya E, Razek SA, et al: Experience of laparoscopic management in 100 patients with acute abdomen. *Hepatogastroenterology* 2001; 48:733-736.A description of the usefulness of laparoscopy in a large series of patients with acute abdomen. A good review of this important diagnostic and therapeutic tool.

Cademartiri F, Raaijmaker RHJM, Kuiper JW, et al: Multi-detector row CT angiography in patients with abdominal angina. *Radiographics* 2004; 24:969-984. A good review of the CT characteristics of acute mesenteric ischemia. This outlines the radiographic findings that have greatly assisted in the diagnosis of this otherwise difficult condition.

Graff LG, Robinson D: Abdominal pain and emergency department evaluation. *Emerg Med Clin North Am* 2001; 19:123-136.Good review of the spectrum of patients presenting with acute abdominal pain.

Macari M, Balthazar EJ: The acute right lower quadrant: CT evaluation. *Radiol Clin North Am* 2003; 41:1117-1136.A modern discussion of the role of CT in the evaluation of patients with right lower quadrant abdominal pain.

Silen W: *Cope's Early Diagnosis of the Acute Abdomen*, 21st ed. New York, Oxford University Press, 2005. This is a classic monograph stressing the importance of history and physical examination in the diagnosis of the acute abdomen. The presentation of nearly all diseases presenting as an acute abdomen are presented. A must read for the surgical resident.

Steinheber FU: Medical conditions mimicking the acute surgical abdomen. *Med Clin North Am* 1973; 57:1559-1567. This classic article nicely reviews the various medical conditions that can present as an acute abdomen. It is well written and remains pertinent to the evaluation of these patients.

Also from the Countway collection

Surgical case-histories from the past / Harold Ellis. Published: London; New York: Royal Society of Medicine Press, c1994.

Link to this record: http://hollis.harvard.edu/?itemid=|library/m/aleph|005581280

Countway Medicine WO 11.1 E47s 1994

Of course you will want to look at the sources referenced by these accounts.

p. 160 Early operative treatment of acute appendicitis (1889)