



ABDOMINAL EXAMINATION

Aydın YAVUZ¹

1. Topographic Anatomy of the Abdomen

Dividing the abdomen into specific topographic regions provides a great convenience for identifying the locations of gastrointestinal symptoms and physical findings. Two methods can be applied for this purpose:

1. Four Quadrant System: The abdomen is divided into four quadrants by a midline and a horizontal line passing through the navel, creating the right upper, right lower, left upper, and left lower quadrants (Figure 1).
2. Nine Region System: The abdomen is divided into nine regions using two horizontal lines passing through the lowest points of both costal arches and anterior superior iliac spines, and two vertical lines (midclavicular lines) connecting the midpoints of the clavicles and the midpoints of the inguinal ligaments. The regions include the epigastrium, umbilical region, and hypogastrium in the middle from top to bottom, and the right and left hypochondriac, lumbar, and inguinal regions on the sides (Figure 2).

¹ M.D., Assist. Professor, Department of General Surgery, Gazi University Medical Faculty, yavuzgs1905@hotmail.com, ORCID iD: 0000-0003-0091-7997

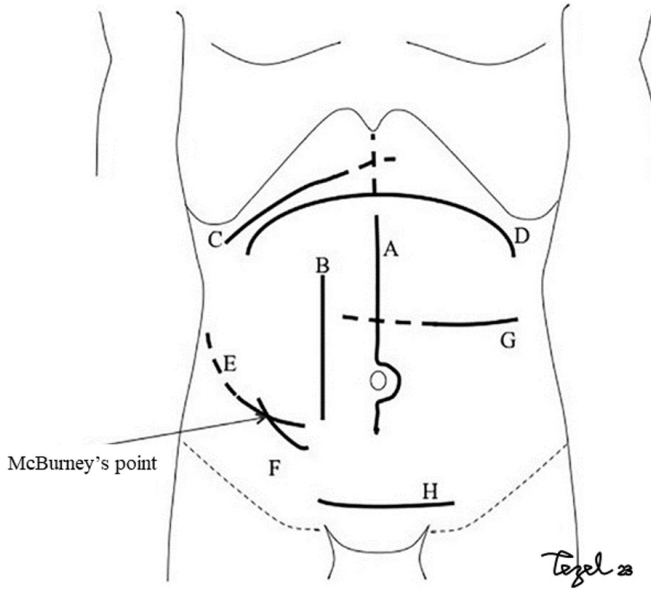


Figure 18. Abdominal wall incisions: A. Upper Midline incision (and lower midline incision); B. Paramedian incision; C. Right subcostal incision with extension along the costal margin (dashed line); D. Bilateral subcostal incision (also known as a “bucket handle” or Chevron incision, and when extended cranially, it is called the “Mercedes” incision (dashed line)); E. Rocky-Davis incision and Weir extension (dashed line); F. McBurney incision; G. Transverse incision with extension towards the midline (dashed line); H. Pfannenstiel incision.

References

1. Townsend Jr. CM, Beauchamp RD, Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice. (2021). 21st Edition ISBN: 9780323640626.
2. Brunickardi FC, Andersen DK, et al. Schwartz’s Principles of Surgery. (2019). 11th Edition. ISBN: 9781260570090.
3. Castell, DO. The spleen percussion sign. A useful diagnostic technique. (1967). *Annals of Internal Medicine*. 67 (6): 1265–7. doi:10.7326/0003-4819-67-61265. PMID 6061941.
4. Park JS, Tandon P. Approach to the patient with liver disease: A guide to common scenarios. (2014). *Medical Clinics of North America*. 98(6):1295-1326.
5. Sharma S, Bergl P. Physical examination of the abdomen: A review. (2017). *JAMA*. 317(1):91-92.
6. Dunphy JE, Botsford TW. Physical examination of the surgical patient. (1959). 2e. W. B. Saunders Co.