

# SYSTEMATIC REVIEW

## **Objective:**

To learn to use the results of a systematic review in clinical practice

## **Assignment:**

1. Read the clinical scenario
2. Assess the methodology of the systematic review
3. Decide how you would respond to the clinical situation

## **Clinical Scenario:**

You are a general surgeon seeing a mildly obese 65 year old male patient referred to you for a ventral hernia. The patient has a longstanding history of diabetes mellitus (10 years) but it is well controlled with an HBA1c of 6.5. He also has mild COPD and hypertension for which he is on a single blood pressure agent. His past surgical history is notable for an open colon resection for perforated diverticulitis. Physical examination reveals an incisional ventral hernia of 4 cm in length that includes a fixed knuckle of bowel.

Upon counseling you recommend open surgical repair with mesh. At this point, the patient mentions that his wife had some kind of mesh placed during surgery for urinary incontinence years ago which subsequently became infected, eroded into her urethra and caused “a ton of misery”. He is most reluctant to undergo mesh repair and ask why you can’t do the repair without the mesh.

You reaffirm that mesh repair is the best way to go and mention the excellent results you have had with this approach in your patients. However, you also agree to discuss the patient’s situation with your colleagues and search the literature for the best available evidence on the open surgical repair of incisional hernias and to see him back for further counseling.

## **Relevant Materials**

1. Murad MH, Montori VM, Ioannidis JPA, Neumann I, Hatala R, Meade MO, Devereaux PJ, Wyer P, Guyatt. Chapter 23 Understanding and Applying the Results of a Systematic Review and Meta-Analysis. In Guyatt G, Meade MO, Cook DJ, Rennie D. *Users’ Guide to the Medical Literature: A Manual for Evidence-Based Clinical Practice*, 3<sup>rd</sup> Ed, New York, NY: McGraw-Hill; 2015.
2. den Hartog D, Dur AH, Tuinebreijer WE, Kreis RW: Open surgical procedures for incisional hernias. *Cochrane Database Syst Rev* 2008(3):CD006438.
3. Bhandari M, Devereaux PJ, Montori V, Cina C, Tandan V, Guyatt GH: Users' guide to the surgical literature: how to use a systematic literature review and meta-analysis. *Canadian journal of surgery* 2004, 47(1):60-67.
4. Tseng T, Dahm P, Poolman RW, Preminger GM, Canales BJ, Montori VM: Users' Guide to the Urological Literature: How to Use a Systematic Literature Review and Meta-Analysis. *Journal of Urology* 2008, 180(4):1249-1256.