



Shahid Beheshti University of Medical Sciences  
School of Medicine  
Department of Medical Physics and Biomedical Engineering

**Seminar**

# *Capsule Endoscopy*

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## **Abstract:**

Capsule endoscopy is a non-invasive medical procedure involving a small, ingestible capsule equipped with a miniature camera. The capsule with the size of a vitamin pill, is swallowed by the patient and travels through the digestive system, capturing images of the gastrointestinal tract. These images, transmitted wirelessly to external receivers, allow healthcare professionals to visualize the small intestine in detail, aiding in the diagnosis of various gastrointestinal disorders such as gastrointestinal bleeding, polyps, or inflammatory conditions. This technology is particularly valuable for assessing areas that are challenging to reach with traditional endoscopic methods, offering a patient-friendly alternative for diagnostic purposes. This minimally invasive technology has proven particularly useful in enhancing diagnostic capabilities while offering patient-friendly alternatives to more invasive procedures. In this talk, history of this technology, main components, novel applications with the aid of artificial intelligence and the future direction would be presented.

Date: **Tuesday 2023/Nov/21 – 1402/Aban/30**

Time: **12:00-13:00**

Place: **Class #1, 2<sup>nd</sup> Floor, School of Medicine**

