

**Linköpings Endoskopi Dagar  
2023**

# **Endoskopiutbildning i Sverige**

## **West meets East**

**Shuichi Miyamoto**  
Centralsjukhuset Karlstad

# Topics

- 1, What is the problem of training in Sweden?
- 2, Learning the basic techniques of endoscopy through EMR.

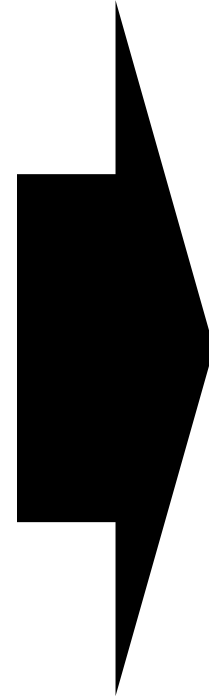
# Karlstad

(June 2021 ~ May 2023)

**118 ESD cases / 2 years**  
3 trainees

# First plan

**Training of ESD**



**ESD**

**How to keep stable viewing?**

**How to use the small wheel??**

**How to control the knife by myself???**

**Basic technique!!!**

# Modified plan

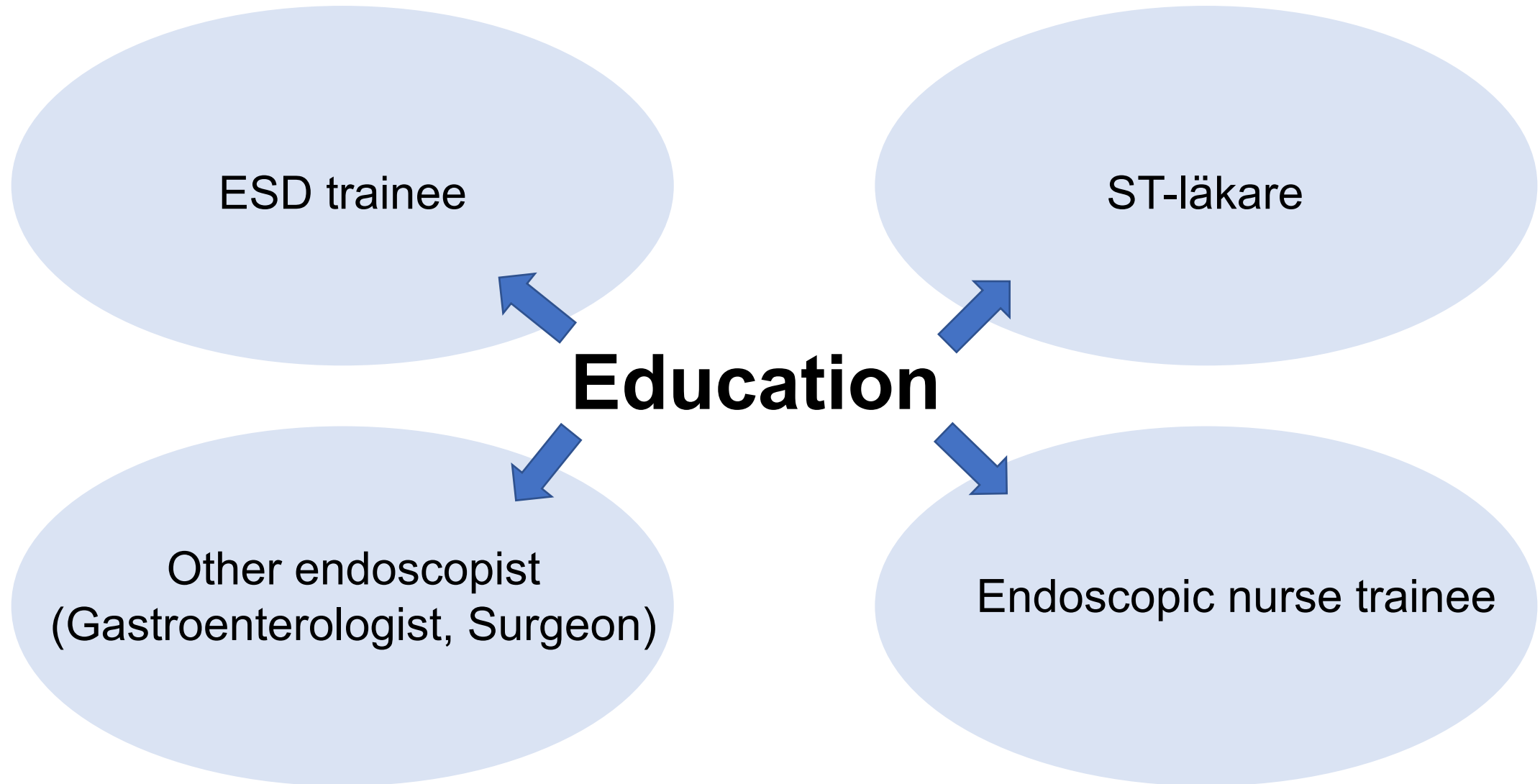
**Improvement of  
basic techniques  
(EMR, Biopsy, etc.)**



**ESD**

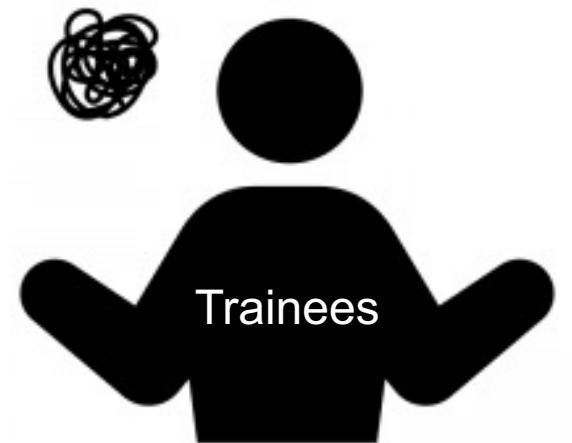


# Karlstad

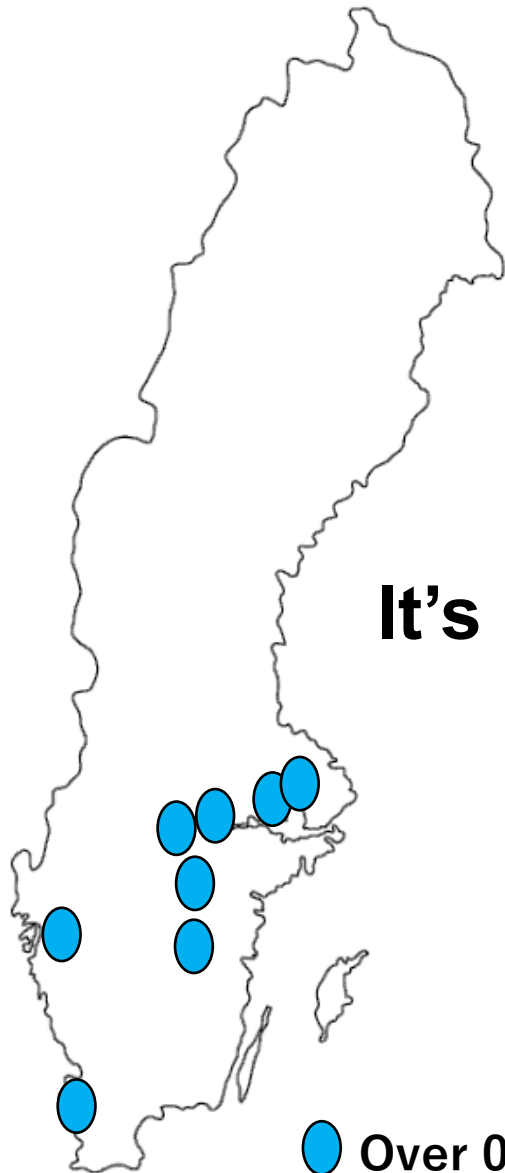





**How can we get good basic technique?**



# Sweden

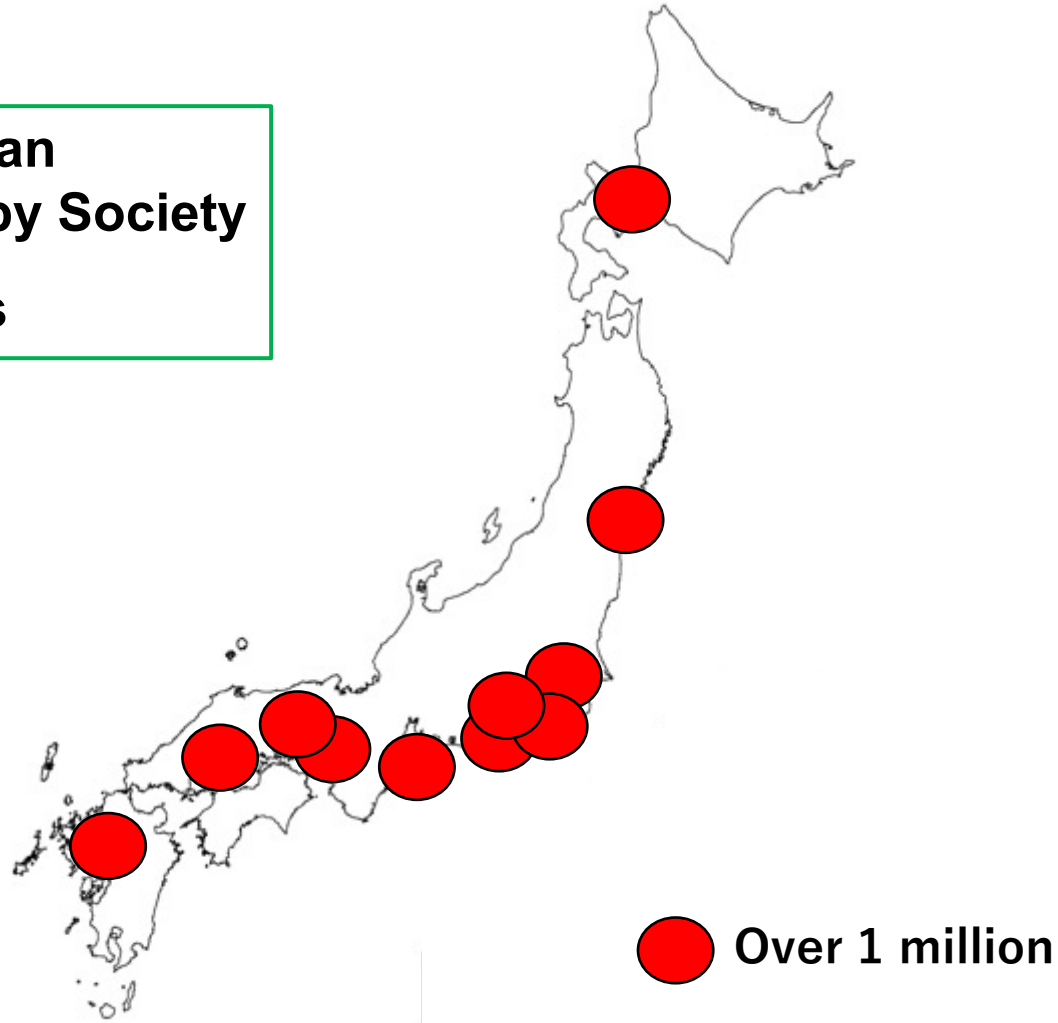


**It's not easy to learn basic technique at own hospital.**

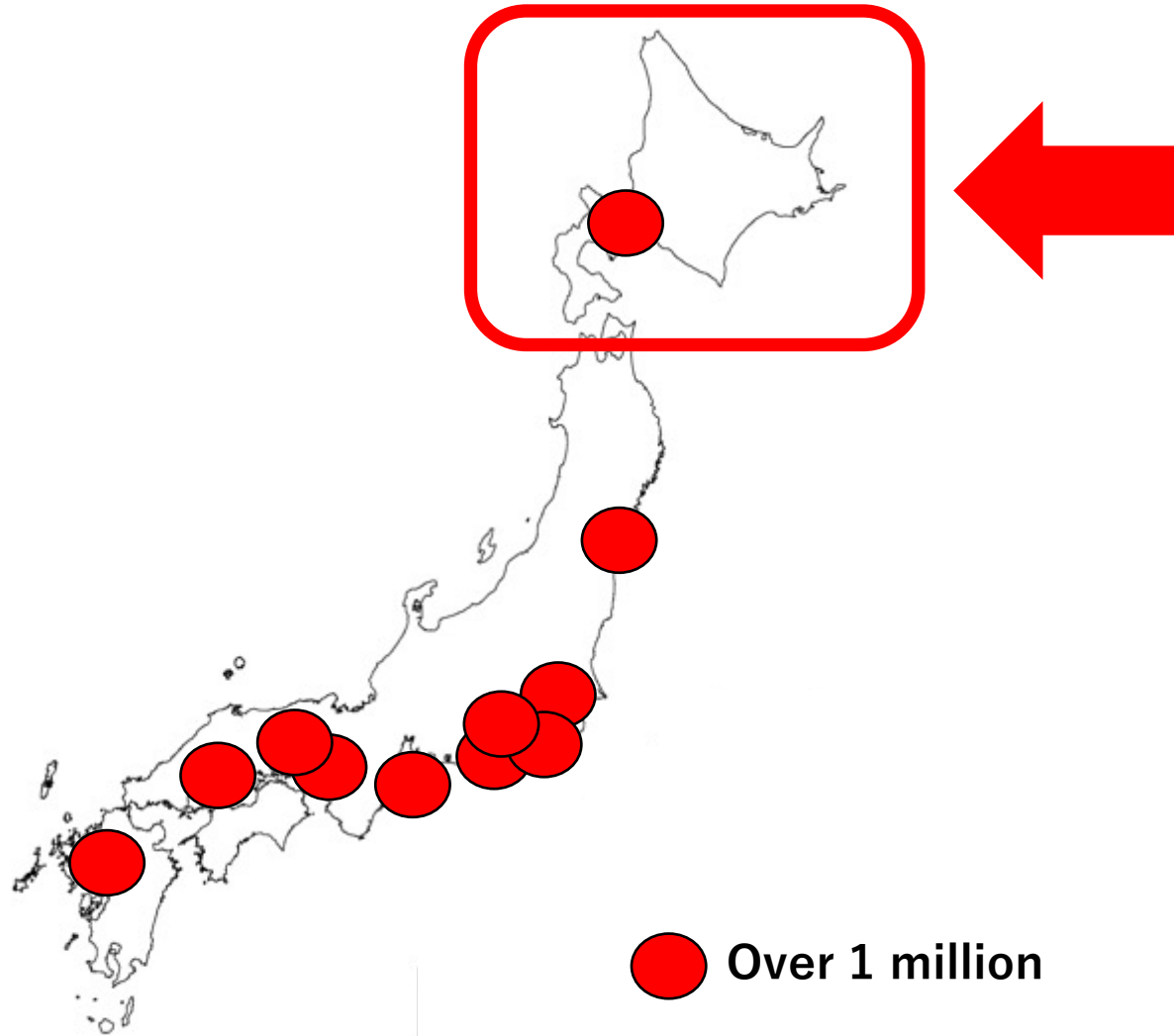
 Over 0.1 million

# Japan

**Certified Fellow of Japan  
Gastroenterological Endoscopy Society  
20.000 specialists**

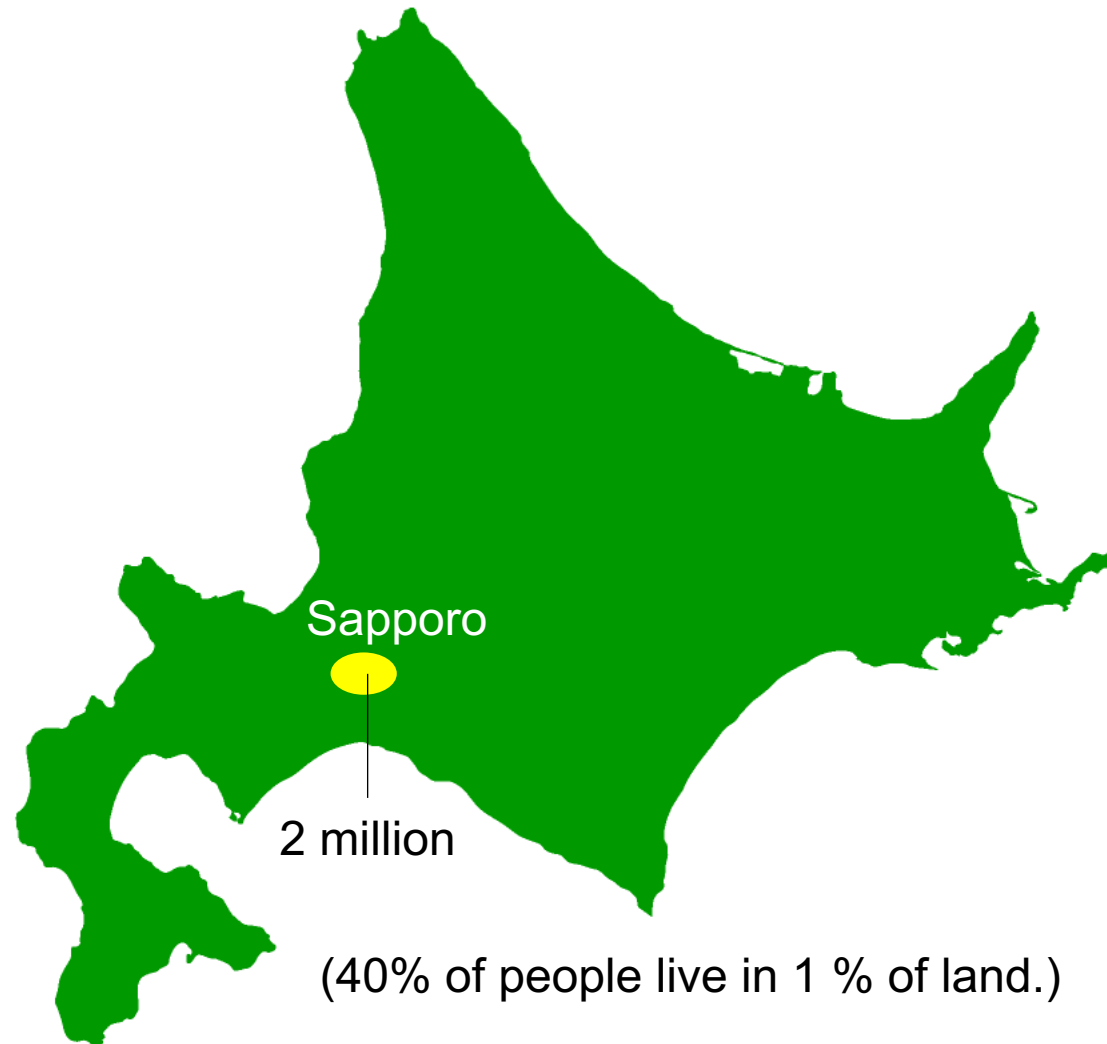


# Japan



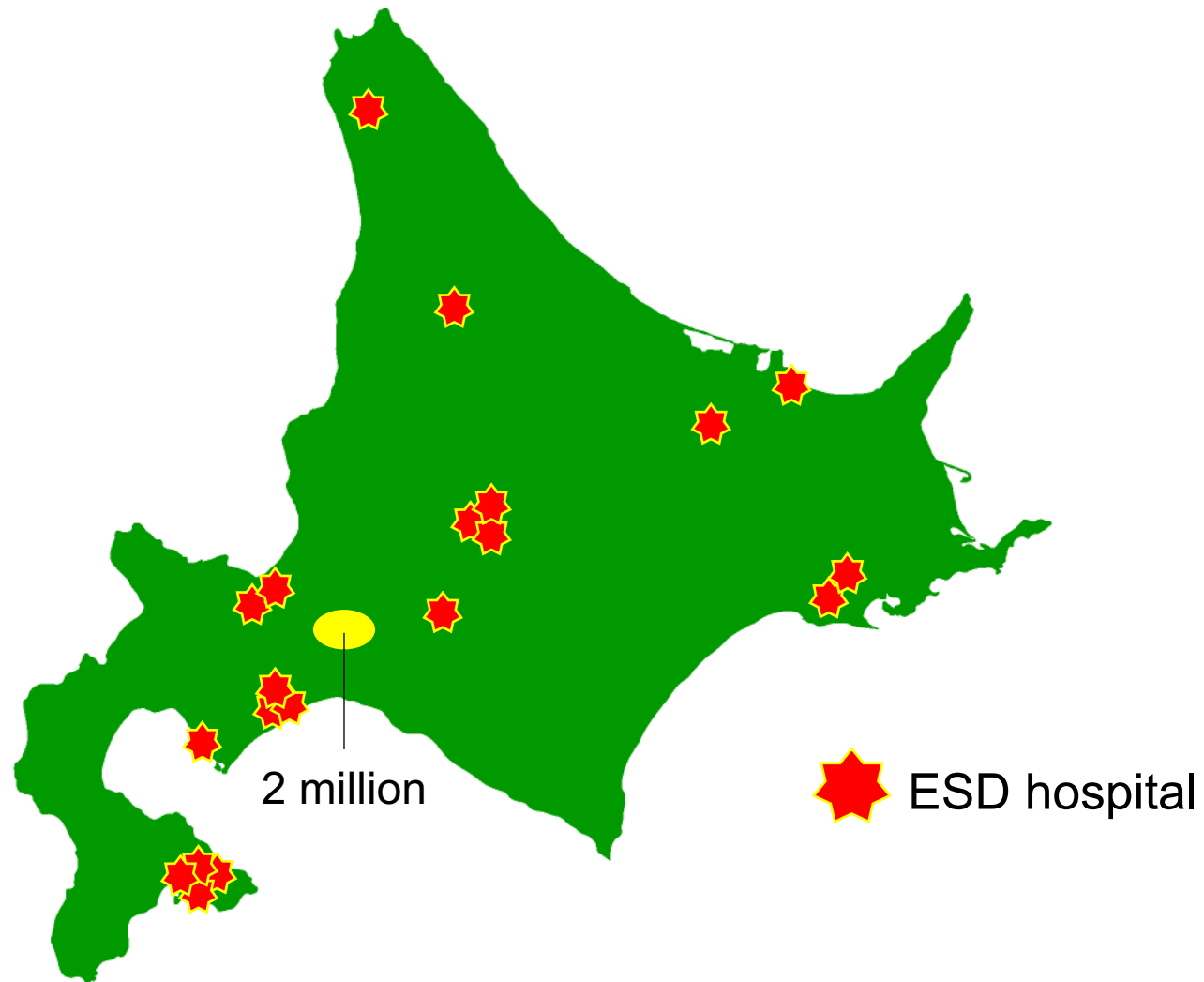
# Hokkaido

(Population: 5 million )



# Hokkaido

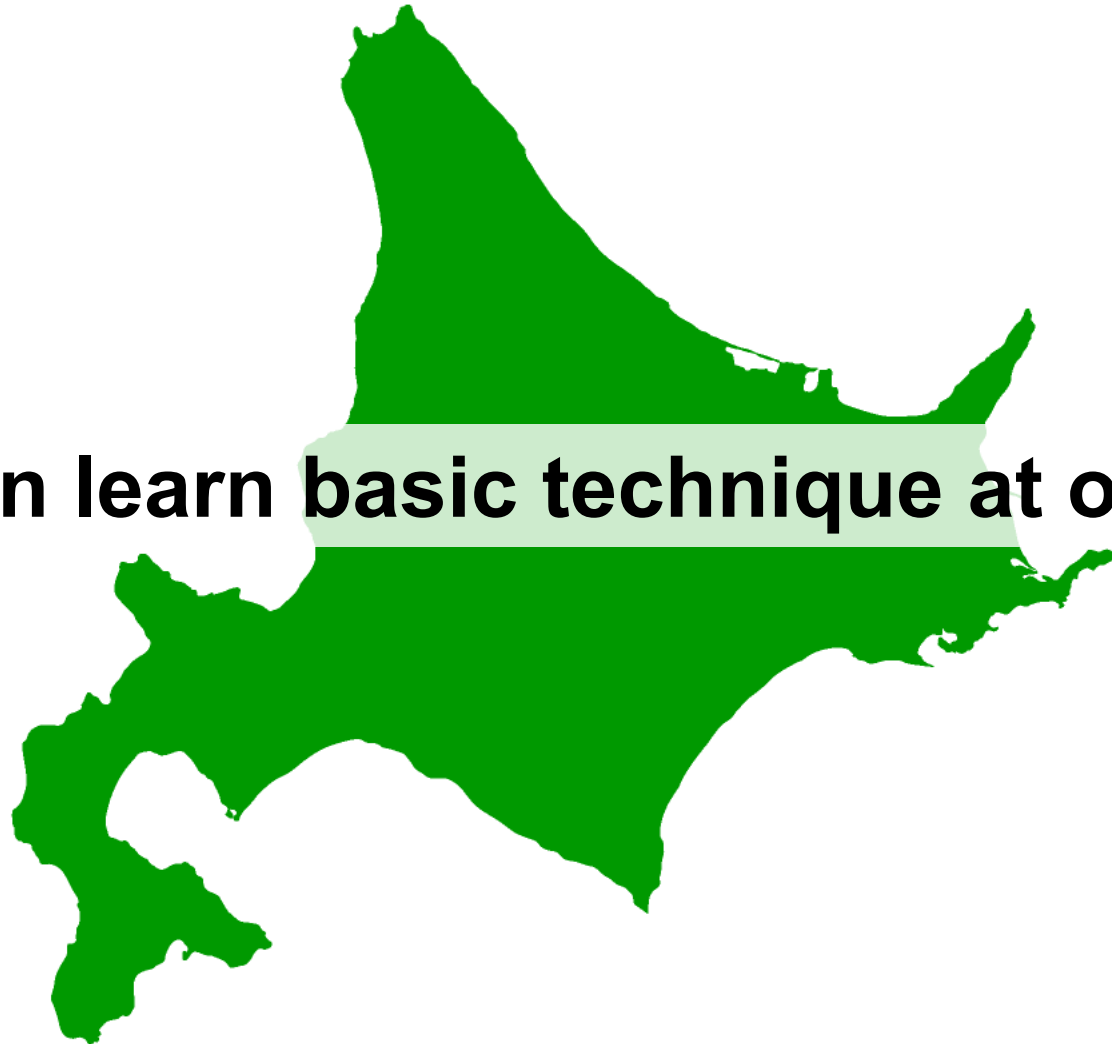
(Population: 5 million )



# Hokkaido

(Population: 5 million )

**Trainees can learn basic technique at own hospital.**



# Learning materials

✓ Many Japanese educational endoscopy books and videos.

The screenshot shows the Amazon.co.jp search results for '内視鏡教本' (Endoscopy Textbook). The search bar at the top contains the text 'すべて 内視鏡教本'. The results show 102 items, with 1-48 items displayed. The page features a sidebar with filters for Amazon Prime, categories (Digestive Internal Medicine, Gastroenterology, Endoscopy, Ophthalmology), customer reviews (4 stars and above), and price ranges (1500-3000 yen, 5000-10000 yen). The main content area displays four book covers:

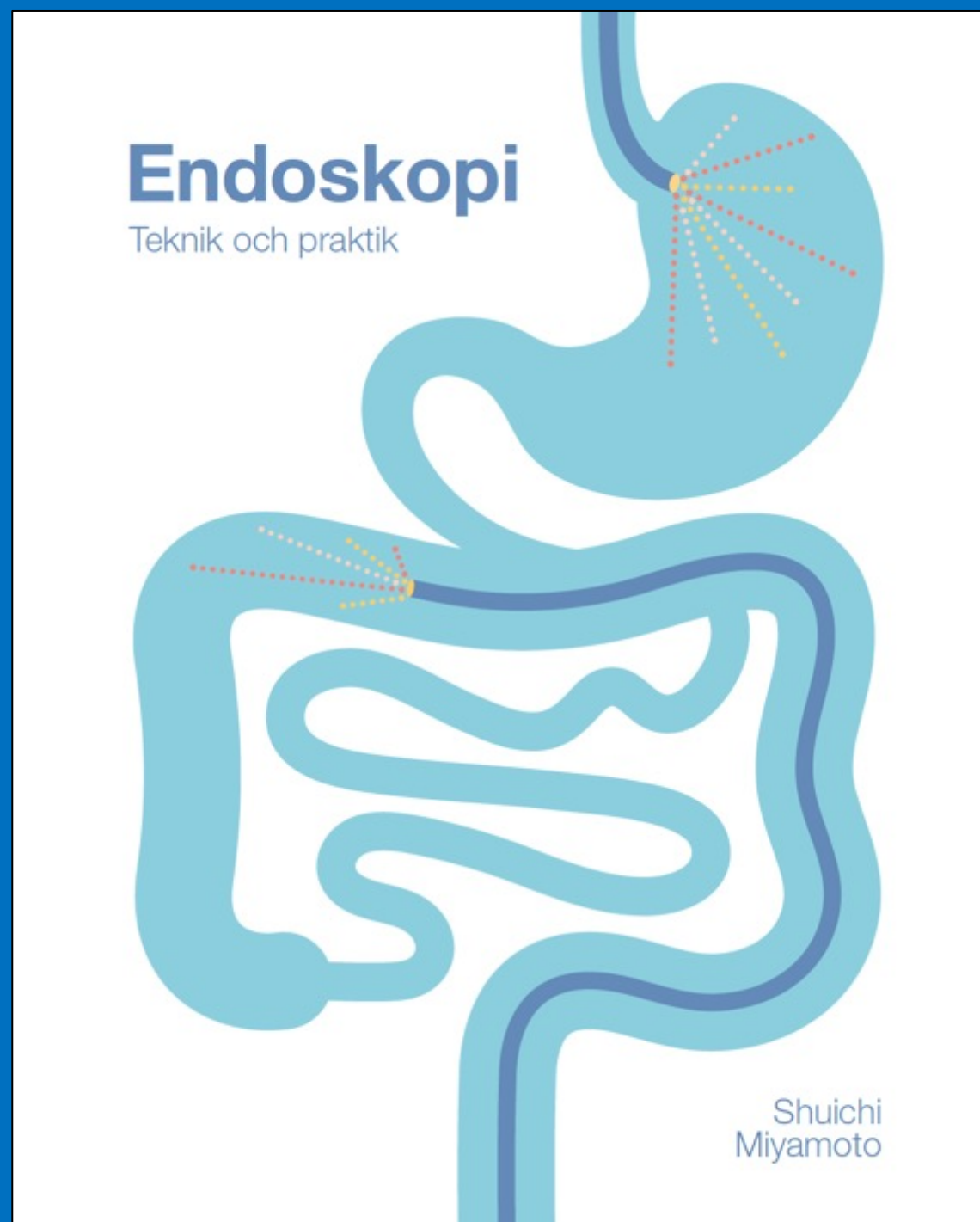
- 改訂第2版 胆膵EUS教本** (Revised 2nd Edition: Biliary/Pancreatic EUS Textbook)
- 上部消化管内視鏡診断の基本とコツ** (Basic and Tips for Upper GI Endoscopy Diagnosis)
- 消化器内視鏡 介助&看護 パーフェクトBOOK** (Perfect Book for Endoscopy Assistance & Nursing)
- 大園流 消化器内視鏡の介助・ケア** (Ohtani's Approach to Endoscopy Assistance & Care)



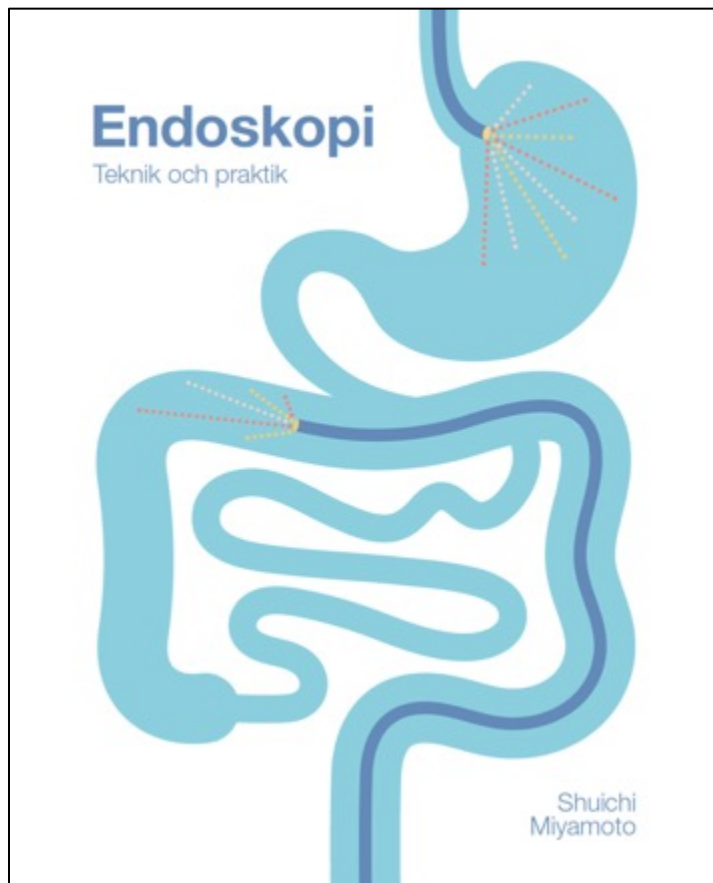
The background of the image is the Swedish flag, which consists of a yellow cross on a blue field. The cross is centered and extends to the edges of the frame.

# **Swedish learning materials**

**May 2023**



**Sweden**



✓ First Swedish endoscopy book!

*Swedish style!!!*

✓ To learn basic technique!  
(Gastroscopy and Colonoscopy)

✓ Complimentary book!



<https://www.tillotts.se/halso-och-sjukvardspersonal/bestall-material/>

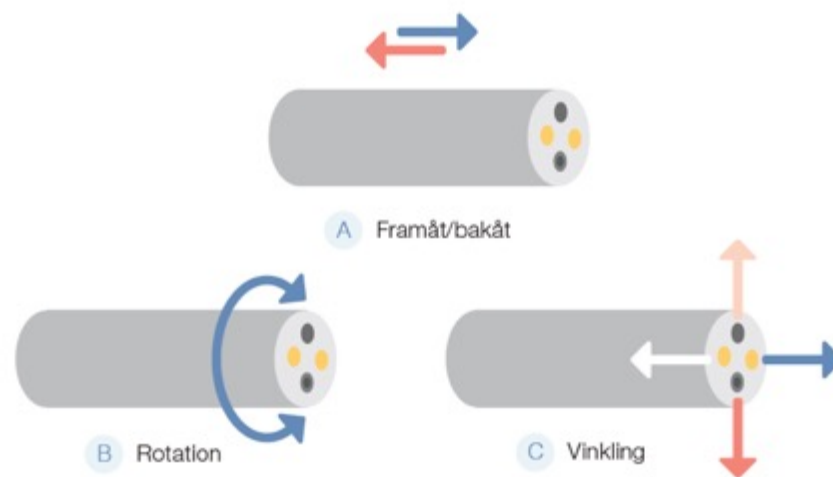
## Så här håller du endoskopet med höger hand

Endoskopet ska hållas ungefär 15–20 cm från patientens mun. Avståndet måste justeras kontinuerligt under ingreppet för att hållas konstant.

Endoskopet ska fattas med ett lätt grepp i höger hand. Om greppet blir för hårt blir det svårt att överföra kraften från vänsterarmen till endoskopets spets.



## Så här styr du endoskopet

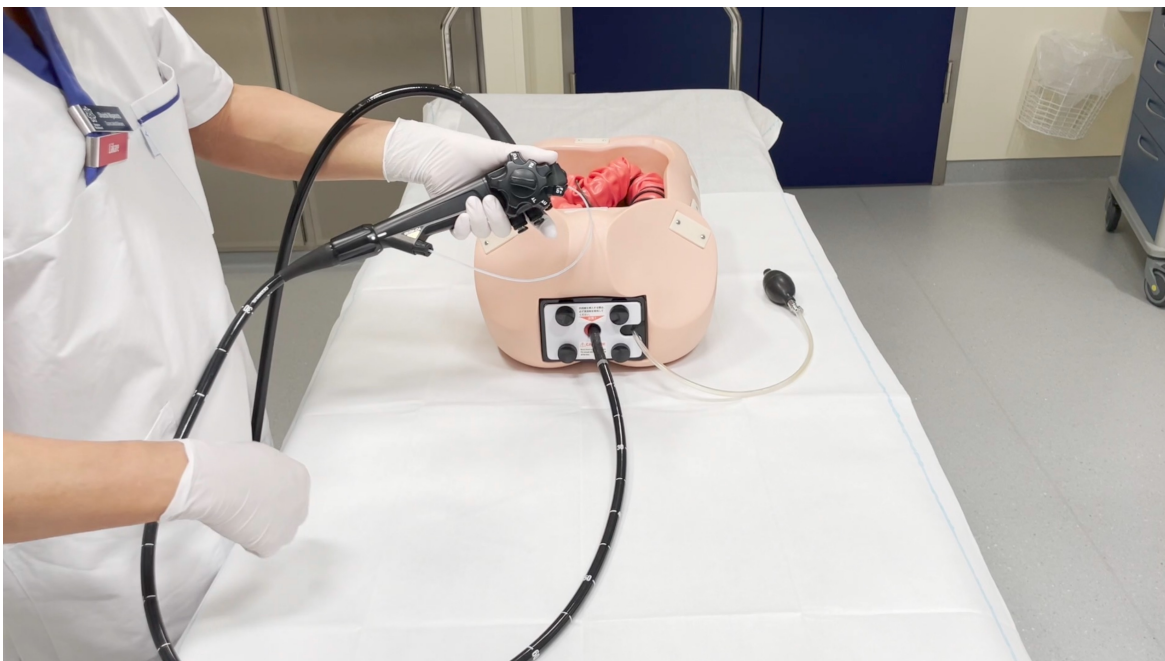


### Endoskopets rörelser

För att kunna styra endoskopet måste endoskopisten först och främst förstå de bakomliggande mekanismerna som ligger till grund för dess rörelser. I huvudsak handlar det om tre rörelseriktningar: framåt/bakåt, rotation och vinkling. Endoskopet kan styras med precision genom en kombination av dessa tre rörelser.



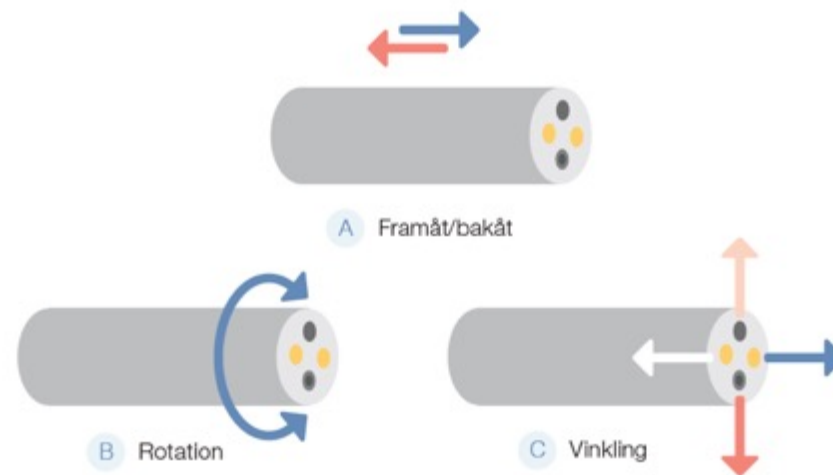
# Video



7

GASTROSKOPI

## Så här styr du endoskopet



### Endoskopets rörelser

För att kunna styra endoskopet måste endoskopisten först och främst förstå de bakomliggande mekanismerna som ligger till grund för dess rörelser. I huvudsak handlar det om tre rörelseriktningar: framåt/bakåt, rotation och vinkling. Endoskopet kan styras med precision genom en kombination av dessa tre rörelser.



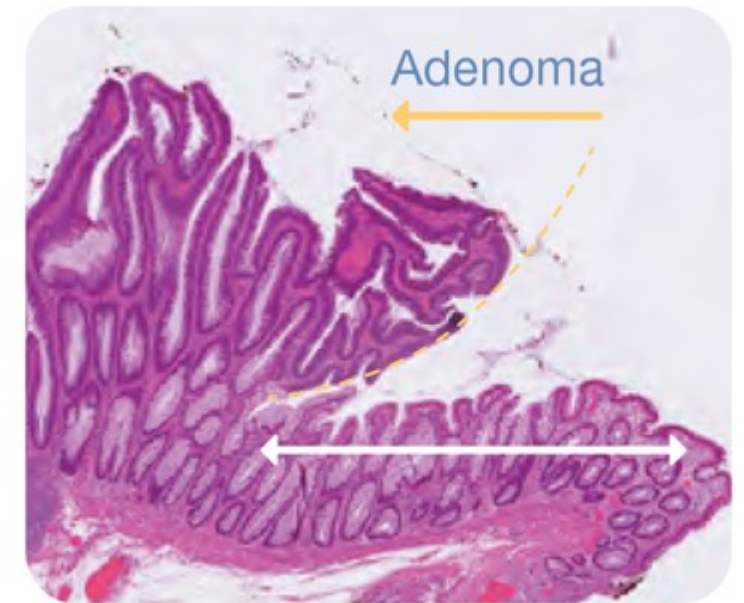
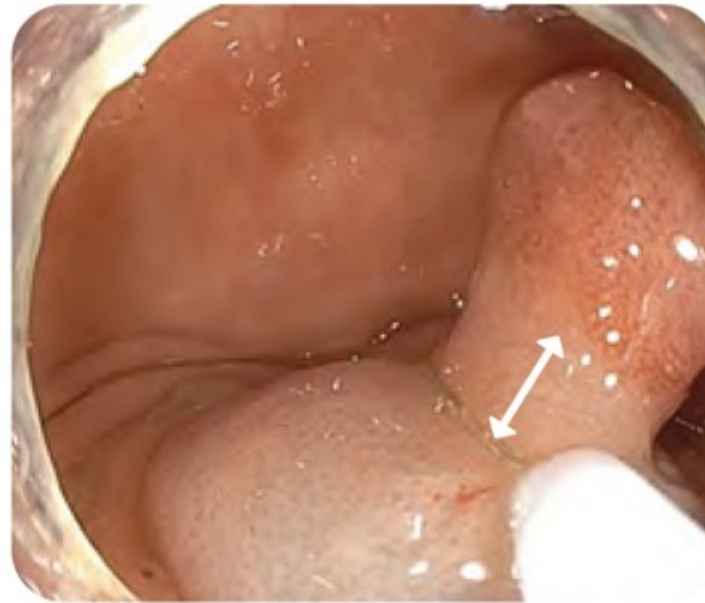
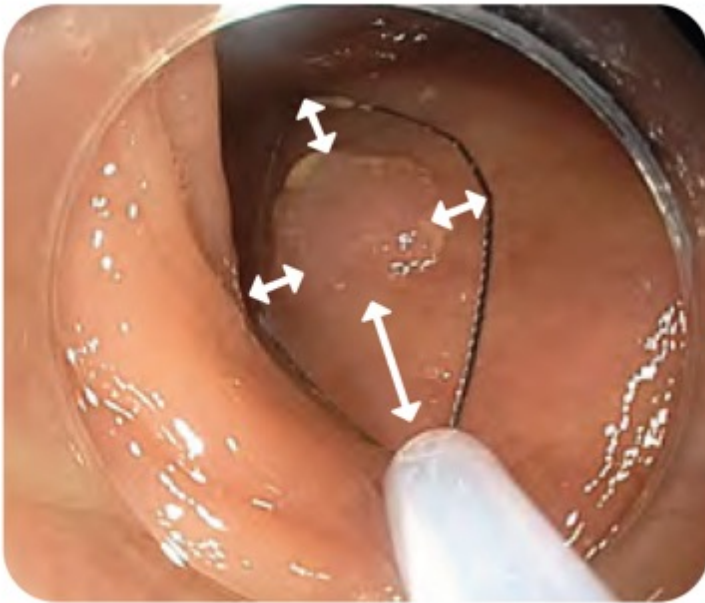
▶ Video 2

Instruktionsfilm för kap. 7

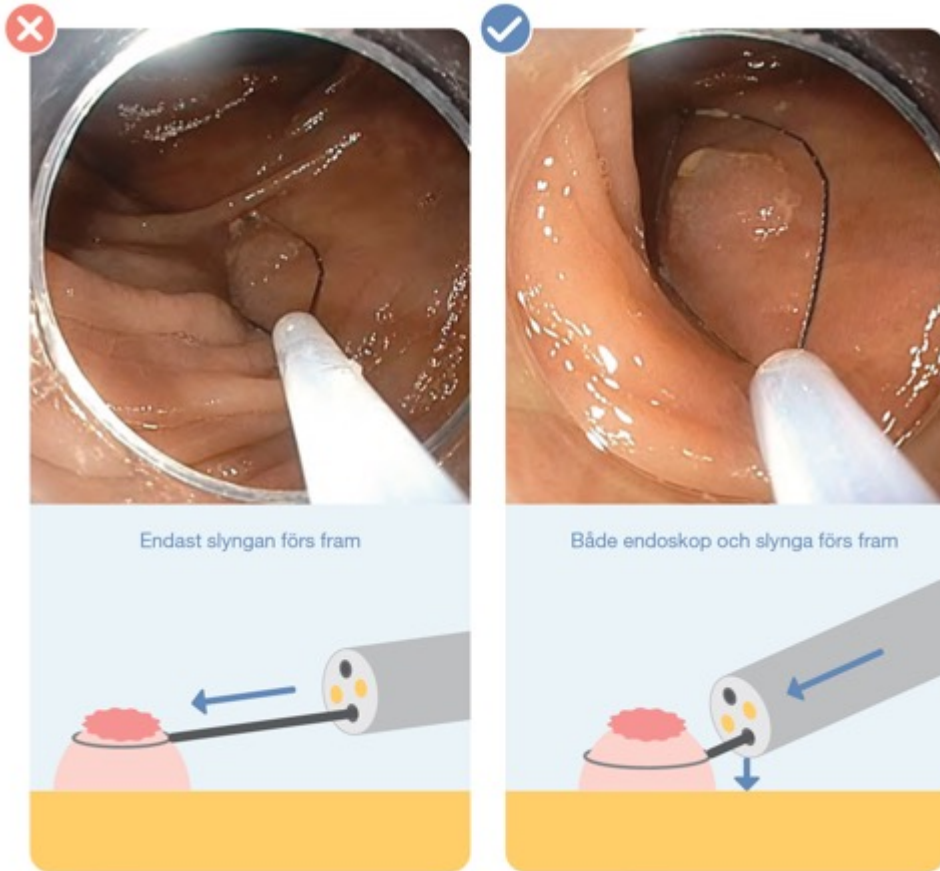
**2. Learning the **basic techniques** of endoscopy  
through EMR.**

# Correct EMR/Polypectomy

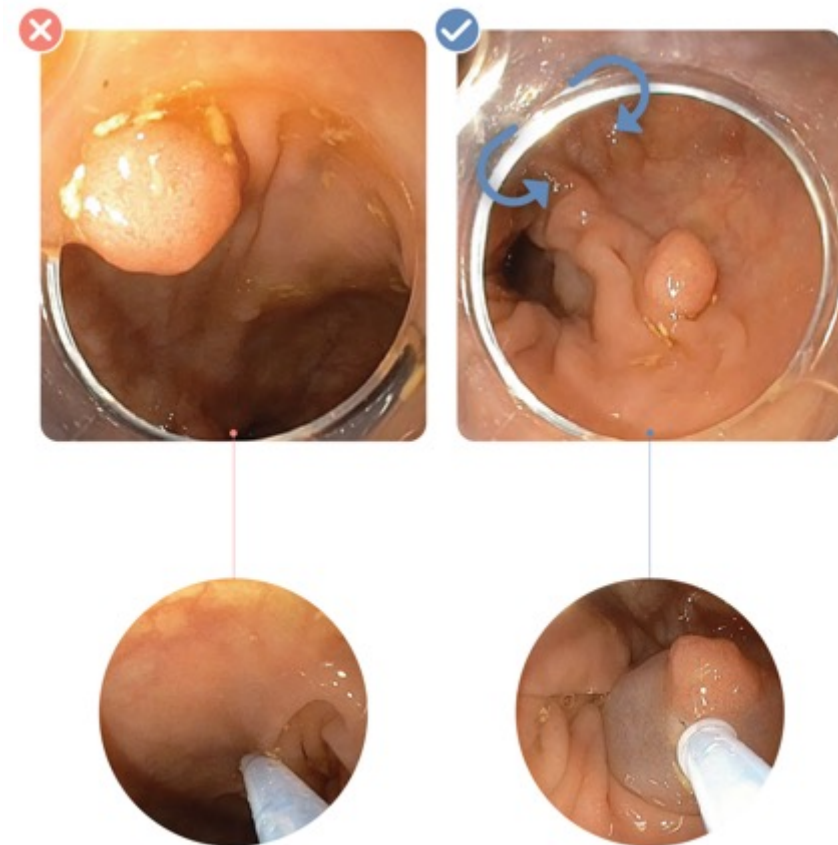
**We have to resect the target with margin  
for radical resection.**



We have to **keep watching the margin during snaring.**



<Keep close viewing>









# **Basic techniques for EMR**

- 1, How to control the snare/injection-needle by myself.**
- 2, How to rotate the endoscopy by left arm.**
- 3, How to control big and small wheel simultaneously.**

# 1, How to control the snare/injection-needle by myself?



# 1, How to control the snare/injection-needle by myself?

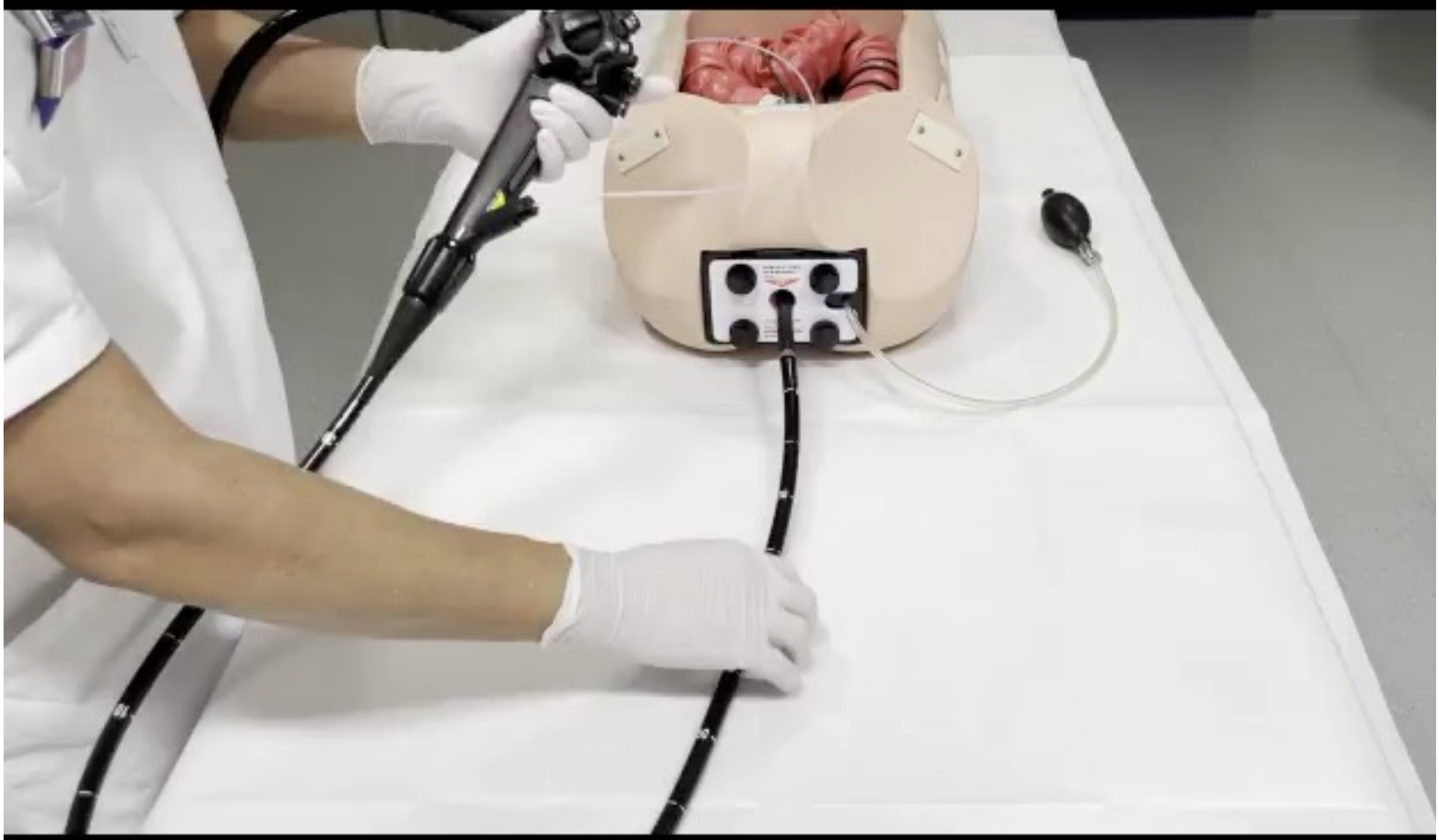


# 1, How to control the snare/injection-needle by myself?

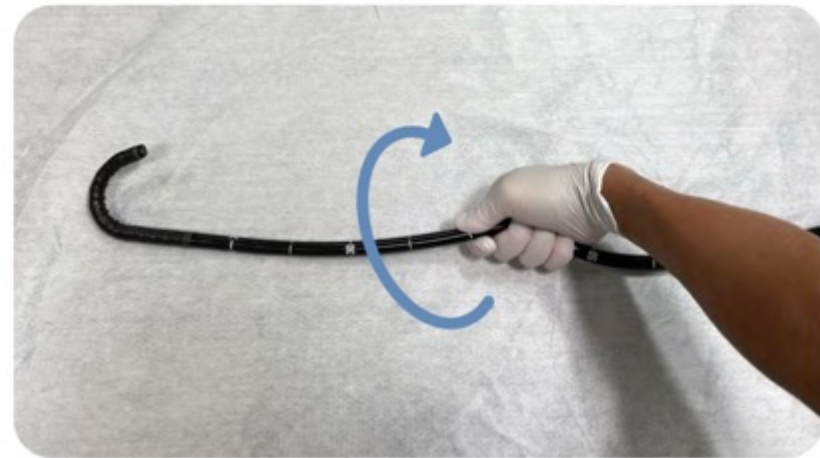
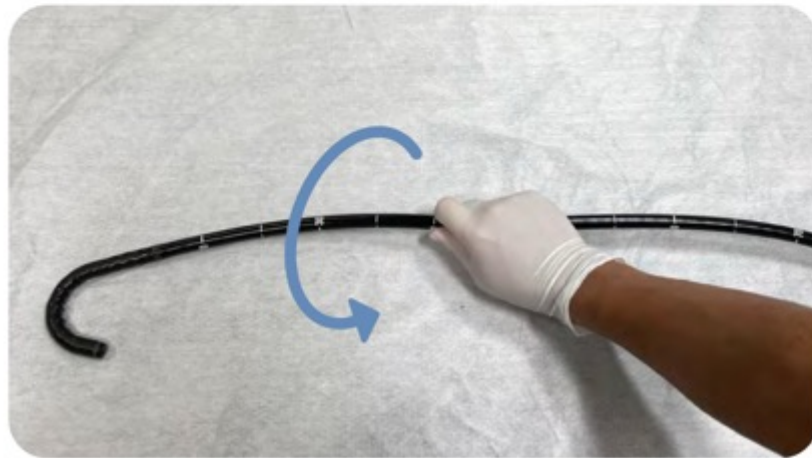
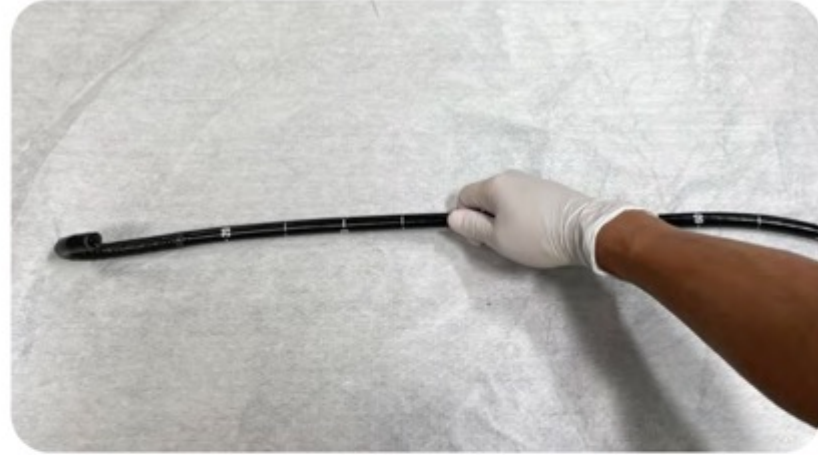
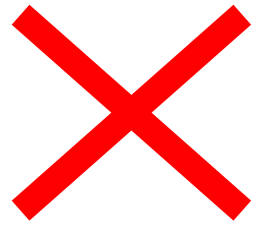
Extra supportive points to get stability!!!



# 1, How to control the snare/injection-needle by myself?



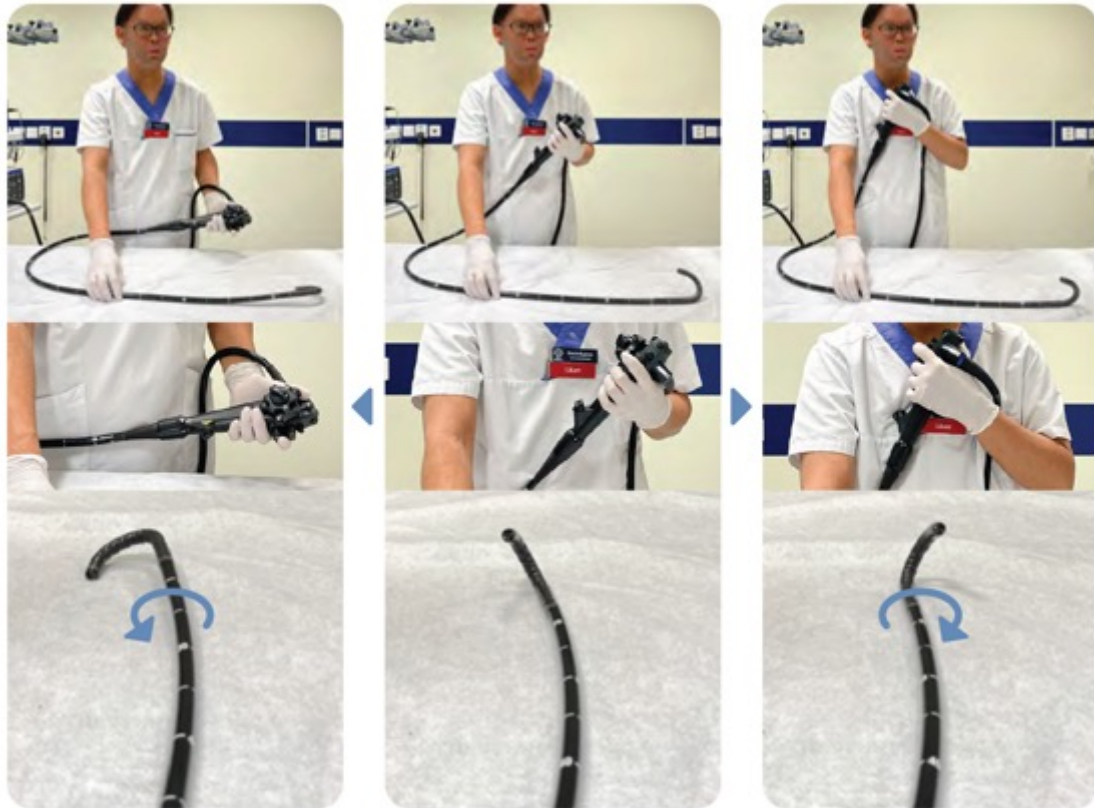
## 2, How to rotate the endoscopy by left arm.



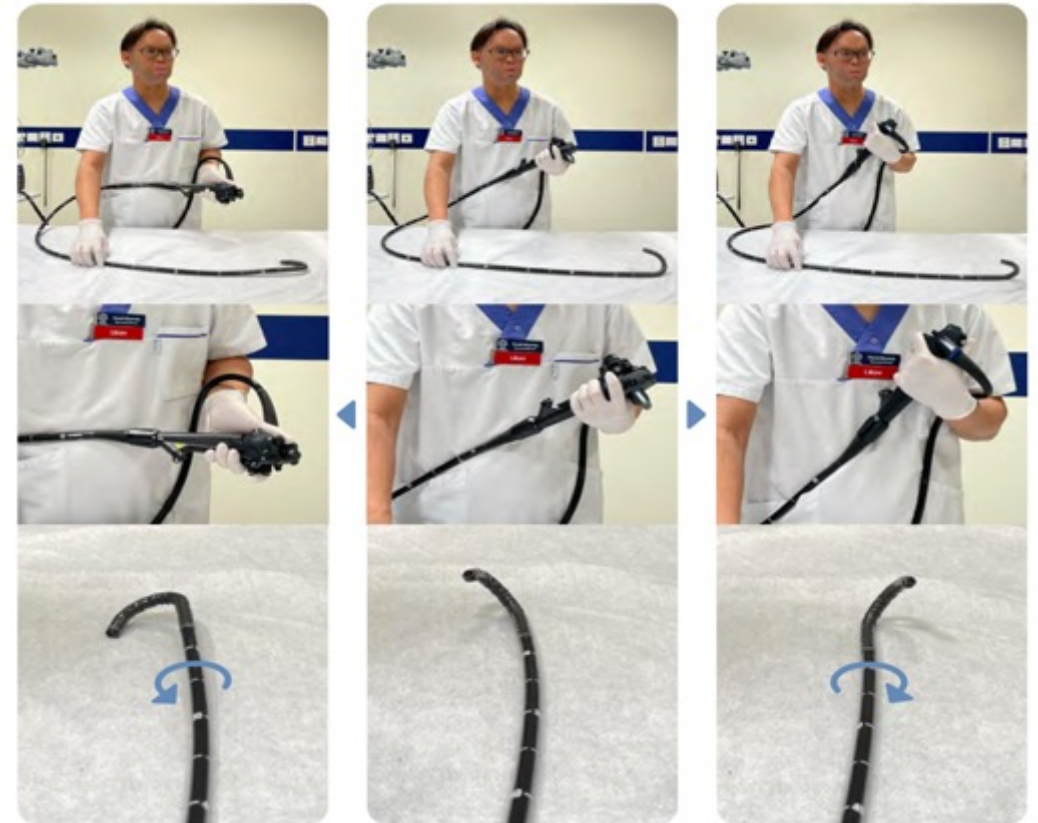


## 2, How to rotate the endoscopy by left arm.

### Arm movement



### Wrist movement



# 3, How to control big and small wheels simultaneously

①



②



Första tumleden: Uppåt/nedåt



Tumspetsen: Vänster/höger

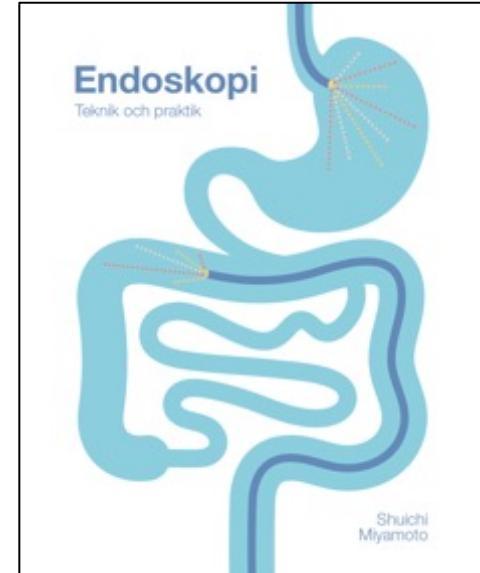
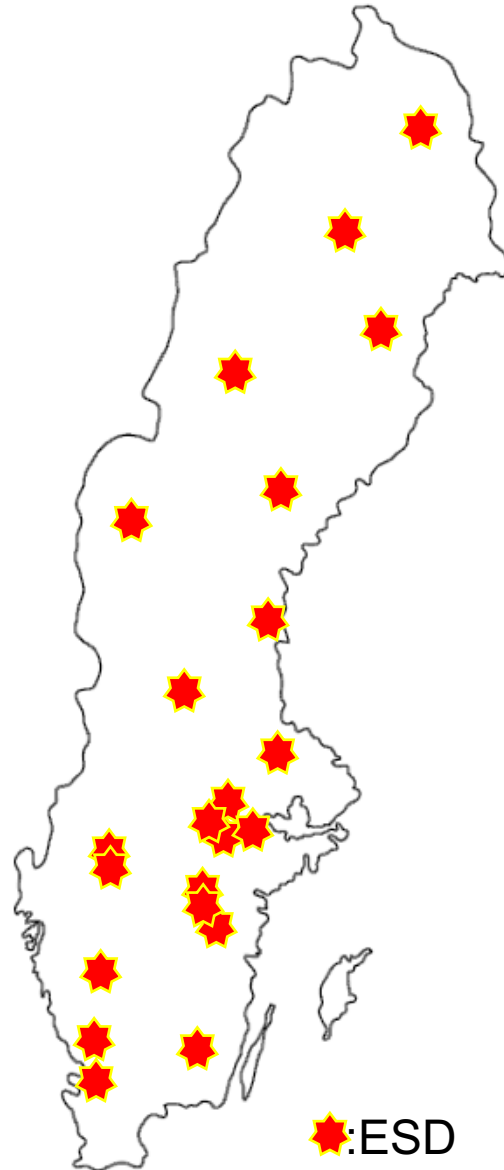
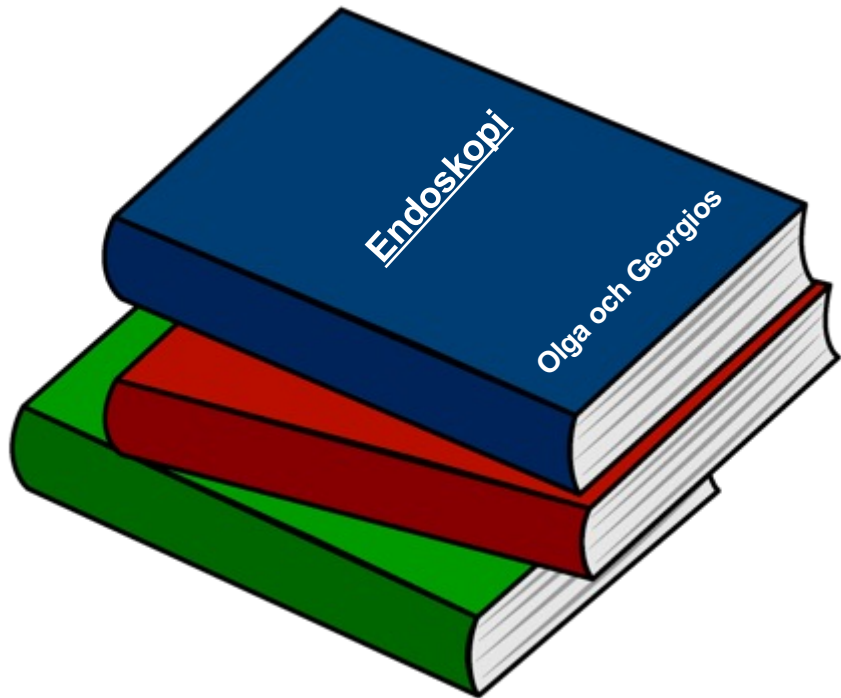
Video from the book

Använda hjulen på handtaget

**Correct basic technique!!!**  
**Let's get it together!!!**

**For all patients in Sweden!!!**

# Future



## Svenska Endoskopiskora



Internationell rådgivare



*Tack så mycket!*

*Vi älskar Sverige!*

