

# MANAGEMENT OF SCROTAL HERNIAS IN SPAIN: NATIONAL SURVEY AMONG AEC (SPANISH SURGEONS ASSOCIATION) MEMBERS

**RIBA-COMBATTI, L.<sup>(1,2)</sup> Bravo-Salvá A.<sup>(2)</sup> Juvany-Gómez M.<sup>(2)</sup> Pereira-Rodriguez, JA<sup>(2,3)</sup> Members of the Board of the AEC Abdominal Wall Section.**

- (1) General and Digestive Surgery. Hospital Universitari Sagrat Cor, Grupo Quirónsalud. Barcelona. Spain  
 (2) Abdominal Wall Unit. General and Digestive Surgery. Parc Salut Mar. Hospital del Mar. Barcelona. Spain.  
 (3) Spanish Association of Surgeons. Madrid. Spain

## INTRODUCTION

- Inguinoscrotal hernia (ISH) represents an advanced form of inguinal hernia, with greater technical complexity and a higher risk of complications.
- Multiple factors influence the treatment of this condition.
- They represent approximately 6% of all inguinal hernias. Despite its notable prevalence, its management remains heterogeneous in Spain.

## AIM

This study evaluates the management of Inguinoscrotal hernia by general surgeons in Spain, assessing adherence to European Hernia Society (EHS) guidelines.

## MATERIAL & METHODS

- An observational, cross-sectional study: survey distributed online to members of the Spanish Association of Surgeons (AEC).
- Consists of 19 multiple-choice questions: address the management of ISH (preoperative, perioperative, and surgical techniques).
- Responses were analyzed based on years of experience and specialization in AWS.

## RESULTS

- 392 responses: 96% of surgeons performed open anterior inguinal hernia repairs.
- Minimally invasive surgery (MIS) was more common among senior surgeons (55.7% vs. 44.7%;  $p=0.03$ ) and AWS specialists (96% vs. 81%;  $p = 0.001$ ).
- Younger surgeons and non-AWS specialists used no-mesh techniques more frequently (5.3% vs. 1.2%;  $p = 0.02$ ).
- For scrotal hernias, MIS was again preferred by senior surgeons (55.6% vs. 44.7%;  $p = 0.03$ ) and AWS specialists, with no difference in TAPP use but significantly higher rates of TEP (80.4% vs. 59%;  $p = 0.001$ ) and eTEP (36.1% vs. 19.3%;  $p = 0.001$ ).
- Only 24.7% of participating hospitals reported AWS specialists routinely managing scrotal hernias.

Table 1. Characteristics of surveyed surgeons, distribution, and management of inguinal hernia.

Técnicas Cirujanos encuestados	N (%)		
AGE		<b>ABDOMINAL WALL UNIT</b>	236 (60,2)
<30	22(5,6)		
30-40 y.	110(28,1)		
40-50 y.	86(21,9)		
50-60 y.	116(29,6)		
>60 y.	58(14,8)	<b>Wall Unit manages all abdominal wall pathology</b>	46(11,7)
		<b>AWU manages complex abdominal wall pathology</b>	190 (48,5)
		<b>Non existing</b>	156 (39,8)

Tabla 2. Techniques used in the repair of inguinal hernia and inguinoscrotal hernia.

Técnicas de reparación de la hernia inguinal utilizadas	Hernia inguinal n(%)	Hernia inguinoscrotal n(%)	P value
<b>Open techniques</b>			
Anatomic techniques without mesh	29(7,4)	10 (2,6)	0.001
Open anterior approach (Lichtenstein, Rutkow-Robbins)	378 ( 96,4)	373 (95,2)	0.16
Open posterior approach (Nyhus, Stoppa,...)	251 (64)	181 (46,2)	0.001
<b>Minimally invasive techniques</b>			
Abordaje endoscópico transperitoneal (TAPP)	267 (68,1)	158 (40,3)	0.001
Abordaje endoscópico extraperitoneal (TEP)	252(64,3)	107(27,3)	0.001
Abordaje endoscópico extraperitoneal extendido ( eTEP )	92(23,5)	42(10,7)	0.001

## CONCLUSIONS

- Adherence to EHS guidelines for scrotal hernia repair in Spain is limited (58.8%) aligning with the recommendations.
- Open approaches remain the most commonly used techniques.
- MIS approaches are primarily performed by AWS specialists and senior surgeons, particularly with higher rates of TEP and eTEP utilization.
- It would be desirable for a greater number of surgeons to obtain European certification, and to promote the development of Specialized Abdominal Wall Surgery Units in our country.