

# **Percepción y uso del Segment Involvement Score por parte del cardiólogo clínico en la prevención cardiovascular basada en el reporte del hemodinamista: un estudio piloto**

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## RESUMEN

La arterioesclerosis es una enfermedad prevalente y una de las principales causas de eventos cardiovasculares. Herramientas como el Segment Involvement Score (SIS) ofrecen una alternativa para la evaluación de la carga de placa coronaria y el inicio de prevención cardiovascular, complementando los métodos tradicionales.

**Objetivo:** Evaluar la sensibilidad de los hemodinamistas a reportar lesiones no obstructivas y los médicos a realizar tratamiento y modificación de la conducta terapéutica del cardiólogo de acuerdo con una adaptación del puntaje de participación de segmento (Segment Involvement Score – SIS) para ser aplicado en hemodinamia en pacientes con arterioesclerosis atendidos en Barranquilla (Atl, CO) en el 2023.

**Métodos:** El estudio, de tipo cuali-cuantitativo, evaluó la conducta terapéutica de 57 especialistas en Colombia frente al uso del Segment Involvement Score (SIS). Se recolectaron datos mediante entrevistas, cuestionarios y casos clínicos simulados, organizados en una base de datos. El análisis se enfocó en características profesionales, percepción del SIS y concordancia en decisiones clínicas con y sin SIS. El estudio fue aprobado por el Comité de Ética bajo la normativa colombiana.

**Resultados:** Este estudio evaluó cómo el uso del Segment Involvement Score (SIS) influye en la conducta terapéutica de 57 especialistas en arterioesclerosis. Los cardiólogos mostraron mayor experiencia (>10 años) y mayor uso del Score de Calcio (70%,  $p=0.04$ ) que los internistas, aunque el conocimiento del SIS fue limitado en ambas especialidades (35% vs 25%,  $p=0.92$ ). Si bien la utilidad percibida del reporte de Placas No Obstructivas (PLN) fue alta (95%), el traslado a escalas de riesgo cardiovascular fue bajo, especialmente entre hemodinamistas (33%). El SIS no impactó significativamente en las decisiones terapéuticas, subrayando la necesidad de formación y protocolos específicos para su adopción clínica.

**Conclusión:** El uso de Segment Involvement Score (SIS) adaptado a hemodinamia tiene el potencial de enriquecer la evaluación clínica y la toma de decisiones terapéuticas en pacientes con arterioesclerosis, su impacto actual es limitado debido al bajo nivel de conocimiento y adopción entre los especialistas. Esto subraya la necesidad de programas de capacitación y protocolos estandarizados para maximizar su utilidad en la práctica clínica

**Palabras clave:** Arterioesclerosis; Angiografía Coronaria; Evaluación de Riesgo; Toma de Decisiones Clínicas; Conocimientos, Actitudes y Práctica en Salud

## ABSTRACT

Atherosclerosis is a prevalent disease and one of the leading causes of cardiovascular events. Tools such as the Segment Involvement Score (SIS) provide a more detailed assessment of coronary plaque burden, complementing traditional methods.

**Objective:** To evaluate the modification of cardiologists' therapeutic behavior based on the Segment Involvement Score (SIS) in patients with atherosclerosis treated in Barranquilla (Atl, CO) in 2023.

**Methods:** This observational, analytical, qualitative study assessed the therapeutic behavior of 57 specialists in Colombia regarding the use of the Segment Involvement Score (SIS). Data were collected through interviews, questionnaires, and simulated clinical cases, organized into a digital database, and analyzed statistically. The analysis focused on professional characteristics, perception of the SIS, and concordance in clinical decisions with and without SIS. The study was approved by the Ethics Committee under Colombian regulations.

**Results:** This study evaluated how the use of the Segment Involvement Score (SIS) influences the therapeutic behavior of 57 specialists in atherosclerosis. Cardiologists showed greater experience (>10 years) and higher use of the Calcium Score (70%,  $p=0.04$ ) compared to internists, although knowledge of the SIS was limited in both specialties (35% vs. 25%,  $p=0.92$ ). While the perceived usefulness of the Non-Obstructive Plaque (NOP) report was high (95%), the translation into cardiovascular risk scales was low, especially among interventional cardiologists (33%). The SIS did not significantly impact therapeutic decisions, underscoring the need for training and specific protocols for its clinical adoption.

**Conclusion:** The Segment Involvement Score (SIS) has the potential to enhance clinical evaluation and therapeutic decision-making in patients with atherosclerosis, but its current impact is limited due to low levels of knowledge and adoption among specialists. This highlights the need for training programs and standardized protocols to maximize its utility in clinical practice.

**Keywords:** Atherosclerosis; Coronary Angiography; Risk Assessment; Clinical Decision-Making; Health Knowledge, Attitudes, Practice.

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