

Medico-Economic Impact of Rotapro® and Shockwave® in the Management of Complex Coronary Lesions

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Introduction



The formation of calcified atheroma plaques promotes myocardial infarctions and strokes.



Among the techniques available for treating complex coronary lesions

Rotational atherectomy using the Rotapro® system (Boston Scientific, CE marked in 2021)



Intravascular lithotripsy using Shockwave® catheters (CE marked in 2017)



Both devices have been available in our institution since 2021

Objective

Assess the use and costs of these devices that enable better treatment of calcified lesions: the ROTAPRO® system and SHOCKWAVE® catheters.

Materials and Methods



Medical-economic study



Retrospective observational study to assess compliance with the indications defined by the manufacturer and validated by the CE marking.



Software used

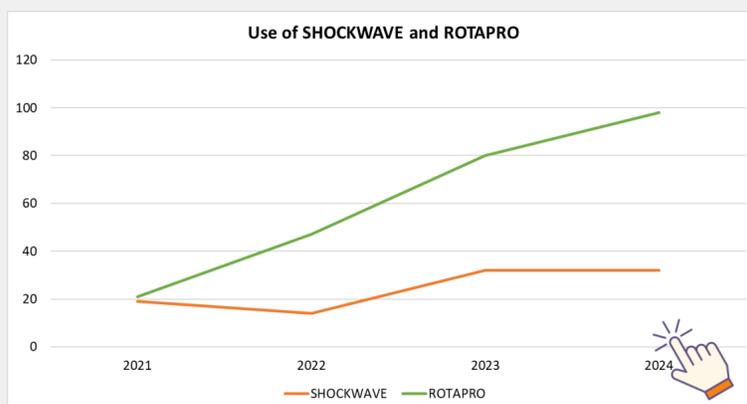
Results

SHOCKWAVE®

Not reimbursed (not LPPR-listed)



Treatment of native calcified coronary stenoses that cannot be dilated by balloon

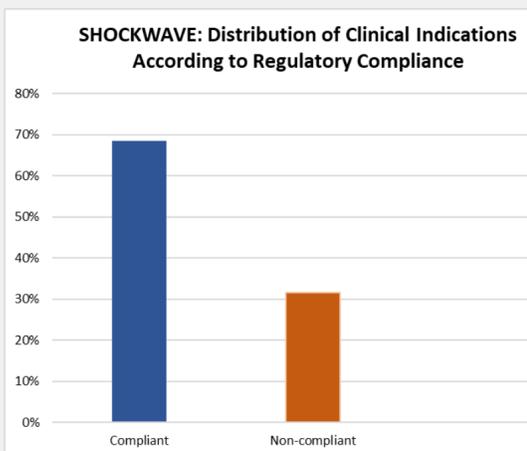


ROTAPRO®

Reimbursed by the French National Health Insurance (LPPR-listed)



Treatment of de novo calcified lesions of native coronary arteries where balloon predilation is insufficient for stent placement.



€2,160 inclu. tax,
Approximately €36 including tax for satellite DMS

€ 1974 incl. tax



Compliance

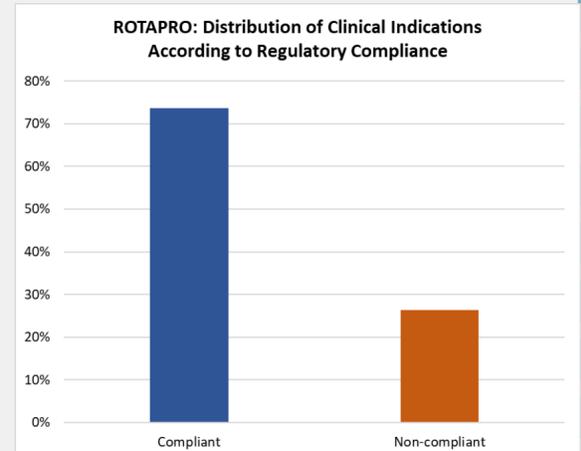


Cost of the device



Average cost of GHS*

* French Diagnosis-Related Group

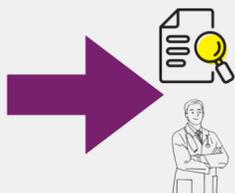


€1,148.40 incl. tax Approximately
€372 incl. tax for satellite DMS

€2220 incl. tax

Discussion

- Increased use of these devices Shockwave price not covered by the GHS
- Hospital budget imbalance



- Explore ways to enhance the value of hospital stays via the PMSI (Medical Information System)
- Raise surgeons' awareness of costs
- Understand non-compliance issues

