Objective:

Compare total cost of percutaneous cryoablation and conventional surgery for patients with extra-abdominal and/or abdominal wall DTs, candidates to local ablative treatment in Spain

Methods:

Target population was identified through epidemiological data

Total spanish population (year 2021)

Narvaez et al. Insights into Imaging (2024) 15:1 https://doi.org/10.1186/s13244-023-01580-w



ORIGINAL ARTICLE

Open Access

Economic evaluation of percutaneous cryoablation vs conventional surgery in extra-abdominal desmoid tumours in the Spanish healthcare system

José Antonio Narvaez^{1,2}, Daniel Bernabeu³, Lorenzo Muntaner⁴, Fernando Gomez⁵, José Martel⁶, María del Mar Castellano⁷, Raúl García-Marcos⁸, Reda Britel⁴, Itziar Oyagüez^{9*}, Nerea Tejado⁹ and Eduardo Ortiz-Cruz¹⁰

Prevalence of desmoid fibromatosis (2-4 cases per 1 million inhabitants/year)

47,326,958

Population with desmoid fibromatosis (n=142)

Proportion of extra-abdominal location among desmoid fibromatosis (80.0%)*



142

Population with extra-abdominal desmoids fibromatosis (n=114)

Elegible population with extra-abdominal desmoid fibromatosis for surgical intervention (70.0%)



114

TARGET POPULATION (N= 80)

n=80)

80

COMPARATORS

CONVENTIONAL SURGERY

VS

CRYOABLATION

Medical charts reviews from 3
Spanish hospitals
(n=54)

DRGs identification

DRG weighted average cost

Complications

Minor surgery for surgical site infection in 18% of cases

Cryoablation kit
Healthcare professionals

- Interventional radiologist
- Anaesthesiologist
- Radiology specialized nurse
- Radiologist specialized technician

Procedure time

Hospital stay

CT for follow-up

Drug costs

Argon bottles

Consumables



Percutaneous cryoablation cost

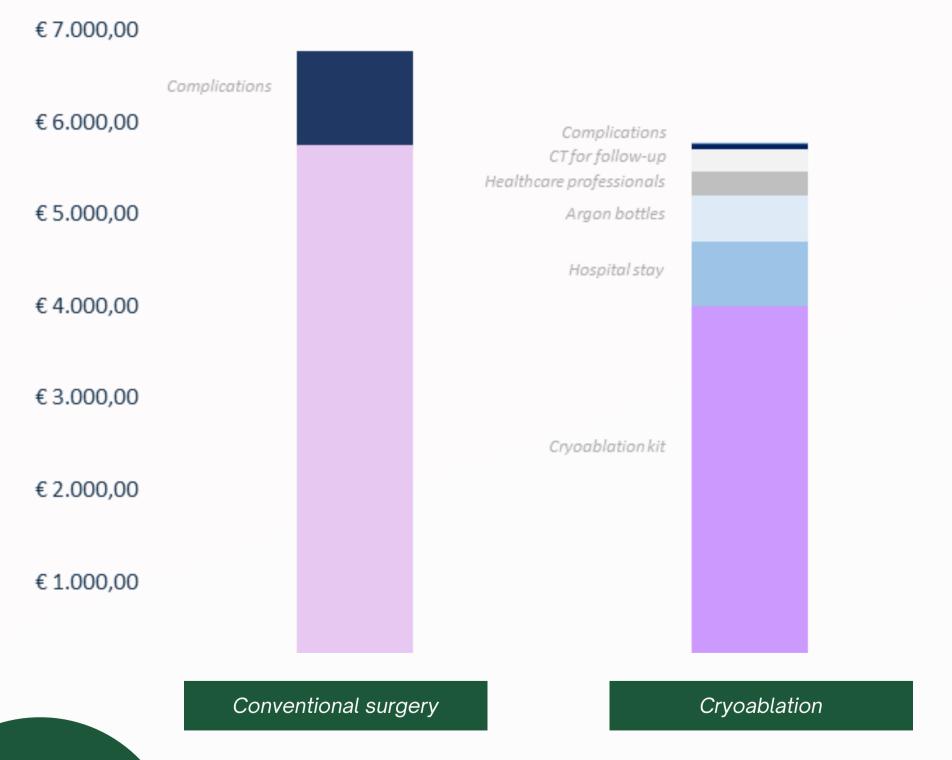
Complications

Debridement in 4.5% of cases



Results

The total cost for percutaneous cryoablation (€ 5,774.78/patient-year) was lower than total cost for conventional surgery (€ 6,780.98/patient-year)



Conclusions

Percutaneous cryoablation versus conventional surgery would yield cost savings up to €80,002 for management on DTs patients in Spain