

Cost-Consequence Analysis of Transjugular Intrahepatic Portosystemic Shunt (TIPS) treatment versus Large Volume Paracentesis (LVP) in the Management of Refractory Ascites: Preliminary results overview from an Italian Healthcare Perspective

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INTRODUCTION

- Refractory ascites is a debilitating complication of advanced liver disease associated with frequent hospitalizations, high health care costs and poor quality of life.¹
- Large volume paracentesis (LVP) is the standard of care but requires repeated procedures and intensive resource use.²
- Transjugular intrahepatic portosystemic shunt (TIPS) is an established alternative that may reduce the need for repeated interventions and associated Healthcare Resource Utilization.³
- To guide decision-making within the Italian National Health Care Service, it is important to evaluate the economic impact of TIPS compared with LVP.

OBJECTIVE

- The objective was to determine whether TIPS offers cost savings through reduced hospitalizations, complications and Healthcare Resource Utilization.

METHOD

- A 2-year cost-consequence analysis was conducted, adapted from a published Spanish economic model.
- Unit costs were derived from regional tariffs and literature, and all costs were analysed in euros.
- Outcomes included implantation, repeat procedures, diagnostics, complications, consumables, hospital stays and health care professional time.

RESULTS

- The total cost per patient over two years was €8,829 for TIPS compared with €28,122 for LVP, resulting in an incremental saving of €19,293 in favor of TIPS.
- LVP incurred substantially higher costs due to the frequent need for paracentesis procedures (€5,843), greater health care professional involvement (€618), consumables (€8,797), hospital stays (€12,110) and complications such as spontaneous bacterial peritonitis (€147).
- TIPS was associated with reduced health care professional involvement, fewer reinterventions and lower overall utilization of health care resources.

RESULTS

PARAMETER	VIATORR Device	LVP	VIATORR Device vs. LVP (difference)
First implantation	€5,203	€0	€5,203
Diagnostic procedures	€316	€0	€316
Repeat implantation	€274	€0	€274
LVP	€2,055	€27,368	-€25,313
Complications	€981	€753	€228
Total	€8,829	€28,122	-€19,293

CONCLUSIONS

- Although TIPS was associated with higher initial procedure costs, it resulted in substantial long-term savings compared with repeated LVP.
- Over a two-year period, TIPS reduced hospitalizations, healthcare professional involvement, and the need for repeated interventions, leading to an average saving of more than €19,000 per patient from the Italian National Health Care Service prospective.
- This analysis demonstrated that TIPS was a cost-saving alternative for the management of refractory ascites within the Italian National Health Care Service.

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