

Palliative semi-permanent abdominal drain for the management of refractory malignant ascites : a retrospective study in a French Comprehensive Specialized Cancer Center.

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INTRODUCTION

The emergence of refractory malignant ascite in the advanced palliative phase significantly impacts the quality of life (QoL) for patients in oncology, causing pain, respiratory difficulties, digestive issues, and impaired mobility. While easily relieved by drainage, the frequent hospital visits and the sometimes-large volume of fluid to be evacuated pose challenges. In search of a solution providing more frequent but smaller-volume drainage, a "semi-continuous" approach using a permanent bedside drain is being considered. However, this procedure can be invasive at this stage of care.

OBJECTIVE

The aim of this work was to examine the feasibility and reliability of a semi-permanent bedside abdominal drain for advanced palliative patients with refractory malignant ascites.

PATIENTS AND METHODS

It's a retrospective study of patients whom a semi-permanent peritoneal drain was placed in the advanced palliative phase. Cases were identified through computerized queries of digital patient records. Data collected included patient information, biological details, cancer type, procedure specifics (date, complications), and end-of-life details (date, place).

CONCLUSION

Malignant ascites severely impairs QoL, leading to repeated visits to the emergency room or day hospital. A non-tunneled semi-permanent catheter, easily implanted at the patient's bedside, may improve QoL. This study serves as a pilot for a prospective cohort, analyzing quality of life and economic costs.

RESULTS

Between 2019 and 2024, we proposed this semi-permanent abdominal drain to 25 patients. They were in an advanced stage of the disease, as 100% of them had metastases and had received a median of 3 lines of specific oncological treatment. Most patients had a poor general condition with a Pronopall score of 4 or higher. Sixty percent of the patients were receiving exclusively palliative care (Table 1).

Table 1. Characteristics of patients

Data expressed as n (%), rounded up to the next decimal place), median [min;max]

Variables	No. (%)
Demographic data	
Female	15 (60)
Age, years	58 [26;84]
Oncology data	
Tumor type	
Gynecological	7 (28)
Breast	4 (16)
Lung	3 (12)
Colorectal	2 (8)
Kidney	4 (16)
Pancreas	3 (12)
B-cell lymphoma	1 (4)
Thymoma	1 (4)
Therapeutic goal	
Palliative chemotherapy	10 (40)
Palliative care only	15 (60)
Metastases	25 (100)
Lines of Chemotherapy	3 [0;9]
Last chemotherapy, days	20.5 [4;145]
General state	
Performance Status	
2	10 (40)
3	11 (44)
4	4 (16)
LDH ≥ 1,5N	6 (24)
Albumin < 33	17 (68)
Score Pronopall	
4-7	15 (60)
8-10	10 (40)

Figure 1. Example of a non-tunneled semi permanent catheter



Table 2. Symptoms, Benefits, and Complications Related to Placement

Data expressed as n (% rounded up to the next decimal place) and mean [min-max]

Variables :	No. (%)
Symptoms before placement	
Pain	21 (84)
Respiratory discomfort	7 (28)
Digestive symptoms (vomiting, nausea, subocclusive syndrome)	8 (32)
Anxiety	1 (4)
Recurrence of ascites < 1 week	25 (100)
Immediate complications	2 (8)
Fall within 24h	1 (4)
Leaks at the orifice	1 (4)
Delayed complications	7 (28)
Infections	3 (12)
Leaks at the orifice	1 (4)
Dysfunction of the drain upon mobilization	3 (12)
Benefits	23 (92)
Return to home hospitalization	15 (65)
Improvement in discomfort symptoms	23 (100)
Death	22 (88)
In Hospitalization at Home	1 (5)
In a palliative care unit	11 (50)
In the palliative expertise unit of Gustave Roussy*	6 (27)
In an oncology medical care unit	4 (18)
Time from drain placement to death (in days)	36.5 [4;147]
Time between death and refractory ascite diagnosis (in days)	93.7 [14;263]

UDEP*: Palliative Expertise Unit is an acute palliative care unit at Gustave Roussy created in March 2019. A patient could present multiple discomfort symptoms, so the total exceeds 100%

Large-volume paracenteses can be responsible for circulatory dysfunction induced by large-volume paracentesis, marked by an increase in cardiac output, a decrease in blood pressure, and a sudden drop in pressure in the right atrium secondary to the reduction of intrathoracic pressure. There is also an elevation in plasma concentrations of renin and aldosterone. This adverse effect is associated with impaired renal function, rapid reappearance of ascites, and shorter survival. This complication is well-documented in cirrhotic patients. For palliative patients with refractory ascites of mixed origin with a component of portal hypertension, performing iterative, small-quantity "semi-continuous" punctures might be better tolerated hemodynamically, with ascites recurring less rapidly. This purely empirical observation would be interesting to demonstrate.

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