



# PleurX indwelling pleural catheter for the treatment of recurrent pleural effusion in advanced ovarian cancer

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One of the most distressing manifestations of advanced ovarian malignancy is the development of a symptomatic pleural effusion. Left untreated, malignant pleural effusions can cause significant morbidity, affecting prognosis and quality of life. Effective drainage of this fluid and prevention of its recurrence is crucial if we want to improve both the quality of life and the life expectancy of these patients.<sup>1</sup>

Several treatment options are available for a malignant pleural effusion, such as intermittent outpatient thoracentesis, pleuroperitoneal shunt, or a pleurodesis using a sclerosing agent.<sup>2</sup>

A PleurX catheter is a fenestrated 15.5 Fr elastomer catheter that was designed for the outpatient management of malignant pleural effusions. A polyester cuff at its end allows tissue ingrowth and protection from infection. Once the catheter is placed, the patient can easily drain pleural effusions at home as many times as needed.<sup>1</sup>

Patients who will benefit most from this technique are those with malignant pleural effusions requiring multiple pleural drainages, failed previous pleurodesis procedures, challenging lung anatomy that

complicates a successful pleurodesis, and those with a shortened life expectancy.<sup>3</sup>

The main risk of this procedure is catheter infection, which can generate a subcutaneous abscess. Caution must be taken in order to guarantee a proper aseptic technique during all the procedure.

Although a PleurX catheter can be easily inserted without thoracoscopy, we present a useful technique to implement at time of diagnostic thoracoscopy, performed in the context of an advanced ovarian malignancy.<sup>4</sup>

Direct visualization assures an appropriate pleural space placement, without adding much more time or morbidity to the diagnostic thoracoscopy procedure.

After the diagnostic thoracoscopy, we make a 1 to 2 cm incision at 5 cm from the thoracoscopy trocar site. We then pass the tunneler and the catheter subcutaneously through the trocar incision until the polyester cuff is inside the skin. Finally, we introduce the catheter into the pleural cavity under direct visualization. Once inserted, we close the trocar incision and fix the catheter to the skin. The insertion of the PleurX catheter outpatient drainage system is explained step-by-step in [video 1](#).

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**Video 1** PleurX indwelling catheter for malignant pleural effusions treatment.



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## Video article

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