## Malignant Pleural Effusion (MPE) case study with Jaypee Valenzuela

Voiceover 0:00:08 - 0:00:12 Rapid listening: evidence-based cancer learning on the go. Presented by eviQ

Education.

Jaypee Valenzuela 0:00:18 - 0:02:12 My name is Jaypee and I have been working as a senior nurse in haematology and oncology ward for about three years now. I am going to share to you my experience on handling a patient with malignant pleural effusion. One afternoon shift where I was in charge, we received a patient from ED - a gentleman in his late 40s, presented with worsening shortness of breath, lethargy and chest pain with background of cholangiocarcinoma with liver and lung mets. In ED, his blood tests showed elevated CRP and white cell counts and his chest X-ray and CTCAP revealed that the patient had bilateral pleural effusion with approximately 2500ml of fluids in his lungs. The medical plan was to admit the patient in the ward while waiting for the medical oncology team to review him in the morning for treatment planning. It was documented that if the patient deteriorates, the patient can have emergency plural drain inserted. Pain medications were also charted and he had altered calling criteria for his respirations and they were happy up to 35 breaths per minute. Upon arrival in the ward, the patient noted to be coughing, hyperventilating and was agitated and unable to lie down. Observations were attended and noted that the patient's respiratory rate was 46 breaths per minute. He was tachycardic at 142 beats per minute. He was saturating low and was significantly hypotensive. A rapid response call was then activated immediately. Oxygen support was changed to Hudson mask which improved the saturation to about 94 to 96%. We positioned the patient to High Fowler's until the medical emergency team responded and reviewed the patient.

Jaypee Valenzuela 0:02:13 - 0:03:45 Observation was continued to monitor, but the saturation has dropped even with increased oxygen support and was still hyperventilating before the patient had syncopal episode and he passed out for about a minute. We then escalated the situation to a code blue. Patient was placed on a non-rebreather mask until the medical emergency team came and the patient had emergency plural drain inserted

by the bedside by cardiothoracic team, which immediately drained approximately two liters of fluid which gave immediate relief to the patient. Blood pressure was monitored and remained stable even without argument infusion, but with IV fluids. The plural drain remained in situ, on suction for the rest of the shift. Observations were monitored hourly, and the patient eventually settled with two litres of oxygen via nasal prongs. The hyperventilation and the chest pain significantly improved. The drain remained in situ for a couple of days until the patient fully recovered and was transferred for rehab. In reflection, I am glad that we have recognised the early signs of deterioration of our patient and that we escalated the emergency needs properly. I personally think that the patient would have had a rough night if we didn't escalate the situation quick enough for the appropriate medical interventions to happen.

Voiceover 0:03:53 - 0:04:00

This is a production of the Cancer Institute, New South Wales, a pillar organisation of New South Wales Health. For more information, visit cancer.nsw.gov.au.