

Cytokine Release Syndrome (CRS) case study

Speaker 1
0:00:08 - 0:01:50

Rapid listening evidence based cancer Learning on the go presented by eviQ education. My name is Nichola Mason. I'm a paediatric fellow at the Children's Hospital at Westmead where I have worked for the last eight months. Today I'll be presenting a case study of a paediatric patient with cytokine release syndrome. This was a patient who had received car t cells for refractory disease. He initially tolerated the CAR T's quite well but 48 hours after receiving them initially became quite unsettled and distressed and wasn't it all behaving like himself with increasing pain. And really that was our first sign that something was wrong with this patient. He subsequently became highly febrile later that evening with desaturation and a new oxygen requirement. And given he had refractory disease at the time of receiving CAR T-cells was our suspicion for developing cytokine release syndrome or CRS was quite high and so he received his first dose of tocilizumab and quite promptly. At that time he also had blood cultures and was started on antibiotics to cover for an infectious cause. He initially responded quite well to that first dose of tocilizumab with improvement in fevers and his respiratory distress. But over the next 48 hours continued to develop high fevers with subsequently worsening respiratory distress and new hypotension and was escalated to increasing oxygen requirement and subsequently commenced on high flow nasal prongs and he became dependent on fluid resuscitation. He went on and received a further three doses of tocilizumab with worsening respiratory and cardiovascular distress.

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Despite this and was subsequently admitted to ICU for management, he was commenced on CPAP, had a chest drain inserted and commenced on inotropes to support his blood pressure. He subsequently improved over the next 48 hours and was discharged to the ward. He did not develop any neurological complications as a result of this, but unfortunately his disease continued to progress. This is a production of the Cancer institute, New South Wales and a pillar organisation of New South Wales health. For more information, visit cancer.nsw.gov.au.