

Doctors said my daughter had a sinus infection, I knew they were wrong: Touching story of girl, 8, who had radiation every day for a MONTH... and how newly-discovered gene could beat brain cancer

- **Elizabeth Doughty, 8, discovered an aggressive tumour that nearly spread to her brain when she was five and has left her with half her eyesight**
- **Her mother Natasha, had a gut feeling something was gravely wrong**
- **Elizabeth underwent chemotherapy once a month for a year and radiation and general anaesthetic for 28 days straight**
- **Although the cancer was eradicated, it could return at any time**
- **Head researchers discovered a gene that may halt cancer in its tracks**

By [LUCY-MAE BEERS FOR DAILY MAIL AUSTRALIA](#)

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It appeared to be a minor persistent cold, but Natasha Doughty had a gut feeling that something was gravely wrong with her five-year-old daughter.

After being turned away from the doctors three times and told she only had a sinus infection, Mrs Doughty dragged Elizabeth to the children's hospital where they scanned her and confirmed she had a life-threatening tumour known as rhabdomyosarcoma.

'That's when my whole world was turned upside down,' Mrs Doughty, from Castle Hill, western Sydney, told Daily Mail Australia.



Even though doctors told Natasha Doughty (centre) her daughter Elizabeth (left with sisters Olivia and Jacinta far right) just had a cold, she knew something was wrong



Elizabeth's family live in constant fear of the tumour returning as if it does, the survival rates are extremely low



Mrs Doughty took Elizabeth, 8, to the hospital where they discovered a tumour the size of a lime in her head

'Your life is quite normal one day and then you're in this catastrophic event.'

Three days after she was admitted to the Children's Hospital, Westmead in Sydney, Elizabeth's eye began to bulge out of its socket and although it was subdued with radiation, she permanently lost sight in her right eye.

The tumour, which was the size of a large lime, was touching her brain at the time and positioned in her eye orbit.

It had intracranial extension with tentacles from the mass about to reach into her brain. She underwent painful lumbar punctures and an entire year of chemotherapy. But the most difficult procedure Elizabeth endured was 28 straight days of radiation.

'Everyday for a month she would have to have general anaesthetic, followed by a mask placed on her face and screwed into the bed to radiate her head,' Mrs Doughty said.



The tumour was touching her brain at the time through intercranium extension and positioned in her eye orbit



Three days after being admitted, Elizabeth's eye bulged and she permanently lost sight from her right eye



The most difficult procedure that Elizabeth endured was 28 straight days of radiation where she underwent general anaesthetic followed by a mask placed on her face and screwed into the bed to radiate her head



She also underwent painful lumbar punctures and an entire year of chemotherapy that fell on every Tuesday

'It's hard, I have to manage my anxiety levels and act normal and positive, but it's still with you everyday.'

The extensive course of radiation managed to shrink the tumour and the chemotherapy eradicated it, leaving Elizabeth in the clear.

However, her family live in constant fear of the tumour re-emerging as although the cancer has only a seven out of ten chance of returning, if it does, the survival rates are extremely low.

'We will be walking around on eggshells for the next two to five years,' Mrs Doughty said.

However, not all future cancer stories may require treatments as invasive as Elizabeth's. Head researchers Dr Jeff Mcowage and Dr Christine Napier at the Children's Medical Research Institute have discovered an ATRX gene that has the potential to halt the progression of the most aggressive forms of cancer.

'Normal cells have a clock that counts down and tells the cell how long it can grow for and in normal cells that clock will run out and the cell will die,' post-doctoral Fellow Dr Christine Napier told Daily Mail Australia.



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Head researchers at the Children's Medical Research Institute have discovered an ATRX gene that has the potential to halt the progression of the most aggressive forms of cancer



Dr Napier has studied this mechanism that aggressive forms of cancer use called the ALT mechanism



If Dr Napier's research is to progress, invasive treatments such as radiation may be eradicated

'Cancer cells can grow forever and hijack this clock to keep it ticking and ticking.'
Dr Napier has extensively studied this mechanism that aggressive forms of cancer use called the ALT mechanism and has also found that normal cells have a locking device, preventing them from letting most diseases in

The mechanism is used by 10 percent of aggressive cancers, including rhabdomyosarcoma. 'The gene could halt these cancers in their tracks, because cells are missing this lock we are hoping this is what makes these cells more vulnerable.'

If Dr Napier's research is to progress, invasive treatments such as radiation and chemotherapy may be eradicated and be replaced by treatments that specifically target the cancer cells, keeping the normal cells intact.



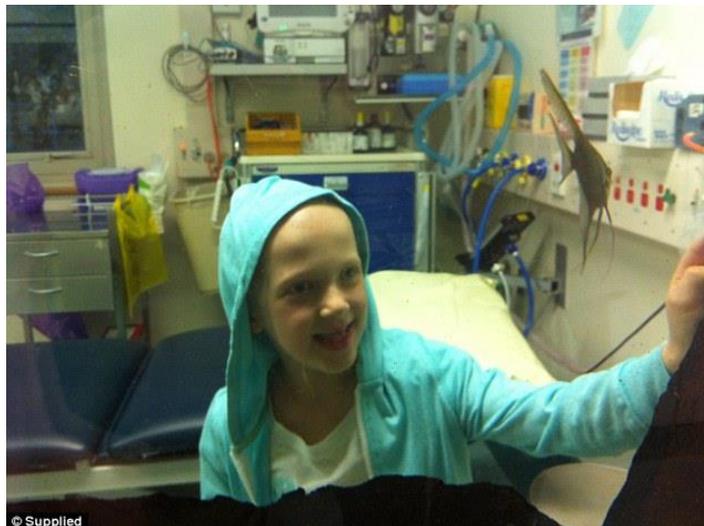
The replacement would be treatments that specifically target the cancer cells, keeping the normal cells intact



'Your life is quite normal one day and then you're in this catastrophic event,' Mrs Doughty said



Although the adjustment to losing half of her eyesight has been difficult for Elizabeth (pictured here with her two sisters, Jacinta and Olivia), she is extremely happy



'She rides her bike, she plays cricket and soccer... to just look at her, you'd have no idea anything was wrong'

Although the adjustment to losing half of her eyesight has been difficult for Elizabeth, it has not stopped her being a typical eight-year-old.

'She rides her bike, she plays cricket and soccer... to just look at her, you'd have no idea anything was wrong,' Mrs Doughty said.

'She's absolutely inspirational.'