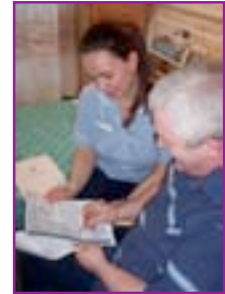


Ada Delaney

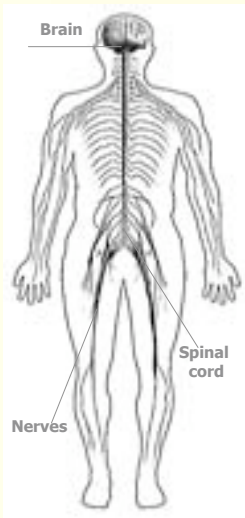
Centre for Neuroregeneration, University of Edinburgh

- Cancer affects up to 26,000 people a year in Scotland, with increases projected over the next 10-15 years
 - Recent advances in the detection and treatment of cancer have led to increased survival rates
- However some patients with advanced cancer can develop secondary growths within their bones
 - These secondary growths can cause pain, called cancer-induced bone pain, which is difficult to treat
- This cancer-induced bone pain can reduce the activity and quality of life for the cancer patient



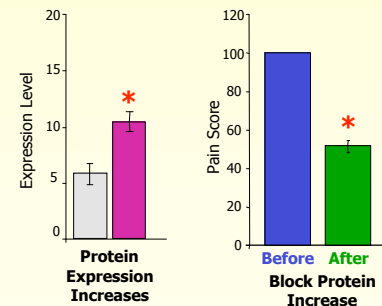
How can we reduce pain & help improve quality of life?

- Cancer-induced bone pain is difficult to manage
- To help reduce this pain we need to develop new analgesics
- To do this we need to understand how a cancer tumour can result in development of pain



- The nervous system detects painful signals
- We investigate how the cancer tumour affects the nervous system
- We identify how the tumour and nervous system interact by looking at expression of different proteins to see what changes occur
- We can then block this interaction and see if this reduces the pain
- We link our benchwork with the clinic to ensure our research leads to benefits for the cancer patient

What have we found?



- We have found a change that occurs in cancer-induced bone pain, there is an increase in protein expression of a receptor
- If we block this increase in protein expression we get a reduction in pain responses
- Our research aims to identify new targets that may lead to development of better analgesics

I am a biomedical scientist. I studied Natural Science at university and decided to specialise in Physiology. I then completed a MSc by researching anxiety and depression. After this I completed my PhD, investigating how chronic pain occurs. I am now a research fellow at the University of Edinburgh.

New insights into evidence-based pain management for cancer-induced bone pain

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