Spasticity Service

The story of Neuroman and Selective Dorsal Rhizotomy

Information for children
BEEP... BEEP... BEEP...BEEP!
Begin Robot System Activation...
    Max-imum power — check!
    Visual power — check!
    Human voice activation — check!

Hello, my name is Neuroman...
And these are my fantastic friends, Megan and James.

We have got some important Neuro-News to tell you, all about SDR at Alder Hey Children’s Hospital in Merseyside.
Megan and James can use my mega mechanical body to explain to you what happens if some of my wires become funny! They will show you how the wonderful staff at Alder Hey used SDR to help take away the stiffness from their legs so that they could to do more stuff for themselves, like bending their legs, sleeping better, getting about and reducing pain.

OK you two, let’s go!

First the doctors had to decide if SDR was right for us so they talked to us and fantastic physios showed us some exercises to practise.
Then we saw a beautiful surgeon called Miss Pettorini who asked if we would work very hard doing special exercises or an activity such as swimming or riding a bike every day at home and in hospital before and after the operation. Of course we also have rest days each week otherwise we would get too tired!!

You will-a! Bellissimo! It’s-a verrrrry important-a!

For a moment Neuroman looked puzzled. His electronic eyes began to blink and a funny whirring noise came out of his ears. He did not understand how Megan and James knew which exercises to do.
But when the children explained that Alder Hey’s fantastic physios, Chris and Morag, showed them exactly what to do, the whirring noise stopped and his supersonic, electronic, multi-coloured eyeballs began to sparkle again.

You see the exercises helped my body to get ready for the SDR op.
And mine! I knew how important it was to strengthen my muscles before the operation because the super surgeons and fantastic physios didn’t just talk to grown-ups, they talked to me! I like the way they do that at Alder Hey!
When I was ready to have my operation, my mum stayed with me while the doctor gave me a special drink to help me to relax.

I like the way Alder Hey let your Mum or Dad stay with you next to your bed for the whole time you are on the ward, even when you are asleep at night time.
Then after you have the drink they put some sleeping stuff called anaesthetic into your hand like this...

The anaesthetic whizzes around your body to make sure that you have a nice sleep while Alder Hey’s Super Surgeon, Miss Pettorini, does a very special SDR operation on your back, right in your spine.

What’s a spine and why does yours need a special operation?
A spine is like a road which connects our brains up with the rest of our body. It uses special messengers called nerves to tell our bodies what to do.

Cooool! So it works like traffic lights on a road or a mobile phone texting a message or a keyboard on a computer?

Yes sort of. When you want to do stuff like move your arms and legs, you think of it in your brain and your brain sends the right message through. But my messages got mixed up so my legs stayed stiff and I couldn’t do some stuff.
That’s what happens to me when my system short circuits!

So when Miss Pettorini did our operations she made it easier for our messages to get through by splitting up some of our messenger nerves to stop the traffic jams!

Right hand wave

Left leg bend

Like splitting up some of the wires in my back!

Exactly!
So what happens after the SDR operation?

First of all the nurses give you medicine to take away any headaches or pains.

Then you realise that the pain in your legs has almost gone away completely and they are not stiff anymore! Actually, they go all floppy and bendy because most of the spasticity has gone and your muscles are not used to moving when it is not there.
So how do you sort that out?

With help from Alder Hey’s fantastic physios and lots and lots and LOTS of our own hard work!

Don’t worry, after the operation you just rest in bed for about 2 days and don’t start exercising until the third day. Then you start gentle exercises in bed.
Phew, this is hard work! How long do you have to do your exercises for?

You **have to** do your special exercises *every day* while you are in hospital which is about 3 weeks and then afterwards every day at home and at school for 2 whole years!

It is hard work and it does tire you out, especially at first, I remember I felt really tired!

But doing your exercises is...
You get lots of help from Alder Hey’s fantastic physios and the brilliant community physios where you live, and your own amazing family at home of course. Sometimes instead of doing exercises you can go to the park or to the swimming pool because you will still be exercising your muscles but in a different way.
You do get used to doing your exercises and it is **definitely** worth it because the operation has reduced the spasticity in my legs!

I can get my feet flatter than I could before. I can do more stuff like get around by myself on my sticks and walker.
Oops, my batteries are low and I still have one more tele-visual message to transmit before I shut down for recharging...
Stand by everyone!
It’s coming through...

Thank You to everyone at Alder Hey Children’s Hospital
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This booklet only gives general information. Do not rely on this booklet alone for information about your treatment.

This information can be made available in other languages and formats if requested.

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