

## **My Pump, Chemotherapy and Cancer**

'Without my pump, controlling my Diabetes would have been awful'

I'm 15 years old and I was diagnosed with Type 1 Diabetes 3 years ago. This came as a massive shock but from the start I was determined to be well controlled. I initially started using Novomix injections resulting in me having to eat at certain times and eat biscuits in between. I found this very restrictive with my busy lifestyle so I soon changed to a new regime when I used multiple Novorapid injections with one basal Levemir injection a day. With this new regime I felt far less restricted, however, I was doing a lot more injections and on special occasions such as going out for a meal I would inject up to three times, once for each course. Subsequently, even though I could eat what I wanted and when I wanted, I realised injections were taking over. Therefore, I asked my consultant about the possibility of having a continuous insulin pump. He supported me with this and I was extremely lucky to be given one two years following my initial diagnosis. This is one of the best decisions I have ever made. Following lots of training with my fantastic pump trainer, Les, I learnt how to use and operate the pump. Soon I was able to use it on my own and with a lot of input the benefits were fantastic.

Having had the pump for a just under a year, in September 2008 I was diagnosed with Osteosarcoma (Primary Bone Cancer). Initially it seemed unreal because you read about childhood cancer but you never expect it's going to happen to you. I was upset at first because I was unsure as to what was going to happen and I didn't like the idea of losing my hair during chemotherapy. Loads of information is suddenly bombarded at you but once I got used to the fact, I was sure that I would deal with the situation and look at it optimistically.

Soon the chemo started and being the first Type 1 Diabetic patient on the children's oncology Ward C2 at Addenbrookes the nurses were worried how the chemotherapy, hydration and anti-sickness drugs would affect my Diabetic control. As I had the pump I wasn't too worried – I think the nurses were more worried than me! Whilst having the chemo I had hydration going into me all the time which had glucose in it so I just upped my basal rate by a percentage. Furthermore, I had to increase my normal insulin requirements by up to 400% whilst undergoing chemotherapy which concerned me at first as I found that some of the anti sickness drugs made me insulin resistant. It was a bit scary as I didn't want my blood sugars to suddenly drop resulting in a serious hypo. I simply pressed a few buttons and put on a temporary rate. However, to maintain good blood sugars and prevent serious hypos I had to check my blood sugars every two hours day and night and if they were too high I upped the temporary rate and bolus corrected. By continually doing this I managed to sustain my blood sugars at a reasonable level just by pressing a few buttons and the pump works out the mathematics of how much insulin is needed. If I begin to think of how I would have managed my diabetes whilst having chemo if I had had to use injections I believe I would have been using needles every two hours and not so accurately working out the amount of insulin and consequently my HbA1c would have been very high.

As it was I attained Hba1c levels whilst having chemo of 7.3. I strongly believe that without my pump, controlling my Diabetes would have been awful. Once my first week of chemo was over my blood sugars had been ok, the nurses were pleased and so was I.

It has been approximately 7 months and I have nearly finished my treatment. During this time, with the use of my fantastic pump, I have managed to keep good diabetic control. Therefore, the people I have to thank are my consultant and all his team for allowing me to have an insulin pump because without it I am sure the last 7 months would have been a completely different story.

By Rosie Van Raalte