

## CASE TWO

**Short case number: 3\_6\_02**

**Category: Children & Young People**

**Discipline: Paediatrics\_Medicine**

**Setting: Urban\_General Practice**

**Topic: Diabetes\_Ongoing Management**

### Case



**Nick Jonas is 14 years old, he was diagnosed with type 1 diabetes when he was 6 years old. He presents today with his mother for a regular check. Nick's diabetes overall has been well controlled and he is generally very good with his diet and injections.**

**His recent blood test results indicate a HbA1c – 8.0%. [normal range 4-6%]. All other results are normal.**

**Nick is currently on a total of 1.0 unit/kg per day of insulin. [intermediate & rapid acting insulin]**

### Questions

1. What are the key components of your regular assessment of Nick?
2. You know from speaking with Nick's mother that over the last few months it has been harder to keep the BSL under control, you note quite a range in his BSL readings from 4-10 mmol/L. Nick's mother suggests that she leave you to talk to Nick on his own. What are the key issues that you would explore with Nick and why?
3. Nick has heard it all before and is really 'over having diabetes', taking into consideration the developmental tasks of adolescence, how would you approach this consultation with Nick and how might this influence your management?
4. What resources & support are available for teenagers with diabetes?

### Resources

- South M, Isaacs D editors. Practical Paediatrics. 7<sup>th</sup> edition. Edinburgh: Churchill Livingstone; 2012.

## ANSWERS

### Question 1:

**What are the key components of your regular assessment of Nick?**

- Emotional well being
- Monitoring diabetes control and compliance with insulin injections
- Hypoglycaemic or hyperglycaemic episodes
- Exercise and diabetes
- Healthy eating
- Physical examination for complications of diabetes (including lipohypertrophy at injection sites, thyroid, coeliac disease as well as for neurological and vascular complications)

### Question 2:

**You know from speaking with Nick's mother that over the last few months it has been harder to keep the BSL under control, you note quite a range in his BSL readings from 4-10 mmol/L. Nick's mother suggests that she leave you to talk to Nick on his own. What are the key issues that you would explore with Nick and why?**

And

### Question 3

**Nick has heard it all before and is really 'over having diabetes', taking into consideration the developmental tasks of adolescence, how would you approach this consultation with Nick and how might this influence your management?**

Adolescence is a time of major physical and psychological change and increasing independence. However- behaviour and degree of responsibility vary enormously during this period. Body image is very important and peer pressure can lead to denial, self neglect and risk taking behaviour.

Adolescents should be increasingly taking over responsibility for their diabetes care but continue to need help and supervision. Often during early adolescence further education is required, directed primarily at the adolescent rather than the parents. Additional education about things such as alcohol, sexuality, drugs, smoking and complications is necessary. Adolescents should increasingly recognise the importance of good blood glucose control to prevent complications and may be more willing to have multiple injections.

Some adolescents begin to resent routines. Also poor or variable compliance with food, injections, and testing can become a problem. Unfortunately it is common to see adolescents doing little or no testing and becoming variable in their routines. Faking or fudging of blood glucose levels is not uncommon as the adolescent tries to 'satisfy' their parents and health professionals by having some reasonable readings in their book. Usually this is temporary and is discovered when the blood glucose meter is downloaded or the HbA1c is out of keeping with the recorded blood glucose readings. It can be a difficult time for families as questions over trust and honesty arise. Often these behaviours are limited to diabetes issues and reflect the significant additional stress that diabetes poses for teenagers. Insulin omission (forgetting or deliberate) is also reasonably

common at this age. This is obviously quite serious as it leads to poor control and risk of serious illness with diabetic ketoacidosis.

Parents and adolescents need to continue working as a team with the diabetes through the teenage years. A more subtle “hands off” approach is needed than in childhood. Studies have shown that handing over total control too early and lack of involvement with diabetes by parents in the teenage years is associated with poorer control and other difficulties, including ‘burnout’ in adolescents. Clearly the degree of involvement will be differently negotiated for different families. The diabetes team are especially important in working with teenagers and may tend to be listened to more than ‘nagging parents’. With greater maturity in later adolescence there is usually improved motivation, interest and compliance with the diabetes management. Some young people with diabetes sail through the teenage years with no major problems.

Issues that should be explored in any adolescent with diabetes include

- Body image, in particular weight.
- Smoking and alcohol (risk of hypos).
- Growth and puberty and changes in insulin requirements.<sup>3</sup>
- In girls, sexual activity, contraception, risk to foetus if poor diabetes control
- Driver's license (application needs endocrinologist approval – need HbA1C <9%)

#### **Question 4**

**What resources & support are available for teenagers with diabetes?**

- Diabetes centre
- Diabetes Australia
- Juvenile Diabetes Research Foundation Australia
- Diabetes Camps

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<sup>3</sup> Royal Children's Hospital Westmead Diabetes Manual