Video Title: Safety & Insulin Pumps in Emergency and Hospital Situations

Video Length: 20:09 minutes

Video Link: http://youtu.be/SC3dAJqMJHM

Target Audience:
• Emergency Room and hospital personnel, first responders (paramedics and fire fighters), volunteers (St. John Ambulance, sport coaches), medical students, diabetes care providers, teachers and teaching assistants, and others with an interest in the safe use of insulin pumps.

Video Purpose:
• To assist with education and awareness about insulin pump therapy both in the hospital and community settings.
• To promote safe practices and highlight safety considerations when working with/caring for individuals who use insulin pump therapy to manage their diabetes.

Cast:
• Marc Payne, young adult pumper
• Kiersten Pianosi, young adult pumper
• Dr. Shirl Gee, Endocrinologist, QEII Health Sciences Centre, Halifax
• Dr. Beth Cummings, Paediatric Endocrinologist, IWK, Halifax
• Dr. Lynne Harrigan, Internal Medicine Specialist, Valley Regional Hospital, Kentville
• Dr. Andrew Lynk, Paediatrician, Sydney
• Shawna Boudreau, RN CDE, Diabetes Case Management Coordinator, QEII, Halifax
• Guest appearances (young people living with type 1 diabetes from across NS): Lucas Arnold, Rebecca Ansems, Meghan MacLeod, Dakota MacNeil, and Olivia Ryerson.

Content Areas:
The video addresses a number of specific topic areas using a question and answer format. Diabetes experts provide answers to these questions and promote safe practices.

1. What do insulin pumps look like?
   • Provides a brief demonstration of the 4 insulin pumps currently available in Nova Scotia.

2. How and where are pumps connected?
   • Provides an understanding of where pumps can found/carried by the individual.
   • Demonstrates both tubing and pod insulin delivery systems.
   • Discusses 1-800 number (location and technical supports available).

3. What should people know in an emergency situation?
   • Introduces the concepts of low and high blood glucose (and the importance of knowing blood glucose values).
   • Discusses the cost of a pump and the need to treat it gently and secure it safely, if removed.

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4. Who should manage the pump in hospital?
   • Introduces the concept of patient involvement in care and the conditions that must be met for pump continuation while in hospital—with a focus on patient/family capability, health professional support, and medical condition (risk associated with). Ref: DCPNS DHA Insulin Pump Policy, 2014

5. How do you suspend/disconnect a pump?
   • Introduces when (under which conditions) suspension/disconnection might be required.
   • Demonstrates how to disconnect a pump.

6. What needs to be considered for surgery—minor elective, emergency/trauma, and major elective?
   • Introduces the differences between elective and emergency surgeries for individuals using pump therapy.
   • Discusses the need for planning, preparation, and inclusion of the pump user and his/her diabetes specialist with any elective surgery.

7. What is the difference between hypoglycemia and hyperglycemia?
   • Explanations are given for the difference between hypoglycemia and hyperglycemia, and the implications of pump therapy with each.

8. How do you treat hypoglycemia?
   • Discusses the best approach based on the state of the patient (conscious or unconscious). The need for a standard hypoglycemia protocol is promoted.

9. How do you treat hyperglycemia (with a focus on DKA prevention)?
   • Provides an explanation of hyperglycemia and the impending risk of DKA.
   • Addresses hyperglycemia in both the unconscious and conscious individual and promotes the essential role of emergency support/treatment.
   • Discusses the need for IV insulin and standard protocols in the treatment of DKA.

10. What is the best source of information about the insulin pump?
    • Highlights the need to access specialized diabetes educator teams/certified pump trainers to advise and support.

Closing Advice:
   “Do not be confounded by the technology—it is just real time delivery of insulin; in fact, it gives you an advantage and provides more flexibility to management. You don’t need to know how to operate the pump you just need to know how it works in collaboration with the patient who has diabetes and his/her diabetes team.” Lynne Harrigan, MD

Supporting Resources:
   • DCPNS District Health Authority Insulin Pump Policy, June 2014
   • DCPNS Video Series: Insulin Pump Initiation for Children and Youth
   This is a series of 7 videos (plus a brief introductory video) aimed at families considering insulin pump therapy. The videos are designed to promote thoughtful conversation about some of the main issues and concerns of parents, young pumpers, and their health care team. They are intended to provide background and context that will be further explored during individual or group teaching sessions. They are not intended to stand alone, but to complement health care team teaching. These videos are intended to promote consistent messaging and assist in managing expectations about insulin pump therapy.

Produced by: The Diabetes Care Program of Nova Scotia (DCPNS), February 2014
Website: http://diabetescare.nshealth.ca