


# CHALLENGE AND CHANGE: TEENS WITH DIABETES

IWK DIABETES TEAM



IWK Health Centre

- 
- Teenage years are a time of feeling different, making changes, testing limits, experimenting with decision making, making mistakes, challenging adult rules and feeling that nothing can go wrong (kidsandteens, 2006)




# Objectives

- To highlight the developmental stages and goals of adolescents
- To review positive approaches to adolescents in the clinic
- To discuss approaches to challenges in diabetes management during adolescence using case examples




SCENES FROM A  
CLINIC NEAR YOU...



**Here comes  
the  
Interrogation  
Team!**

**Her A1c will  
be high**

**They're going  
to think I'm a  
terrible parent**



TEXT to my BFF:  
OMG At clinic BLA  
BLA

Mom is going nuts  
says Im going to die  
or something. Got to  
go  
TTYL

Dance Tonight  
L8R

**Finally  
Someone's  
on MY  
side!**



**I get no credit!**

**Yeah, like it's my  
fault I have  
Diabetes!**





# Thoughts on the Scenario

- What were your observations?
- What went well?
- What would you have done differently?



# Life for Teens with Diabetes


- A teen with diabetes has to consider their diabetes before they can do things that their friends take for granted like stopping for pizza, staying out late, applying for a drivers license, sleeping in.
- “I cannot do lunch time insulin. I am called a druggie, a junkie. I am bullied because of it. I won’t do it”



# Teen's Real Goals

- Stop the endless nagging from the parent(s)
  - And the diabetes team too
- Get to be with friends

From Parenting a Teen ...with Diabetes; Natalie Bellini



# Teens Experiment and Explore - It is natural to see if you can get by with less

- Mistakes are the usual bridge between inexperience and wisdom. ~Phyllis Theroux, *Night Lights*
- The only real mistake is the one from which we learn nothing. ~John Powell



# Many Teens Rise to the Challenge

- Katie, age 14
  - A1c 7.1, down from 7.6 and 8.3 on the last 2 checks
  - Competitive athlete, good student
  - Babysits a young child with developmental delay and on a pump
- 2 sibs – one on a pump, one tried it and likes MDI better, both maintain active extracurricular life and A1c 7.8 or less



## Glycemic Control in Adolescents vs Adults

DCCT Data	Adolescent	Adult	
HbA1c (Intensive)	8.1%	7.2%	J Peds 1994; 125: 177
HbA1c (Conventional)	9.8%	9.0%	
Insulin Dose (u/kg/d)	0.96	0.62	

Metabolic control is poorer,  
Insulin requirements are higher

} vs adults &  
prepubertal kids



# Principles for parents (and diabetes team).....

- Teens are not ready to do diabetes alone – don't give them the management and then complain about the A1c
- Voice your frustration at the diabetes, not the teen
  - What did you eat? Why are you so high? Translates to “This is all your fault”
- Tell them you know they are trying
- Don't threaten with complications – they can't grasp the concept. It makes you look bad. It makes them angry.

From Parenting a Teen ...with Diabetes; Natalie Bellini



# Scare Tactics Don't Work

- “I wonder when my parents, and doctors warn me about what might happen what they're getting out of it because all it does for me is angers me more, and makes me feel worried, stressed, cross; in truth it does nothing to motivate me, except worry me, and yes, that makes me think, but then it makes me hate the fact I've got diabetes more than ever.”

GEMMA, age 17

From: <http://www.drwillem.com/essay/2008/essays2008list.htm>



# Principles for the team

- When reviewing log book or meter acknowledge testing has been done and recorded
- Blood sugars are information for guiding treatment and not identified as “good or bad”
- Explore with the teen how they could use this information to make a change
- They are more likely to do what they decide themselves than what they are told to do



# Look for and compliment the positive

- It might be just saying “We appreciate that you took the time to come”
- What ***IS*** working?
  - Engage the parents in this dialogue in the clinic
  - Ask them to notice what is being done at home



# Ask the Teen

- What would he like to do differently?
- What does he think he needs to do to get better results
  - Problem solving
- What goals have meaning for her?
- Set small achievable goals



# Ask the Teen

- Use scaling questions
  - To set goals
  - To guide them in thinking about what will help and what will be hard about carrying out the goals
- How will you know you are going in the right direction?
- Will anyone notice?



# Case 1 – 14 yr old with Type 1 DM

- Diabetes since age 7. A1C 14.3, sporadic blood glucose testing, insulin omission, dietary indiscretions
- Missing school and doing poorly, staying up late at night using computer.
- 14 day BG averages:
  - Bkfst 15.9 (6 days)
  - Lunch (no tests)
  - Supper 16.6 ( 14days)
  - Bedtime 15.4, (5 days)



# Case 1

- Discussed with the teen what she was willing to do (stage of change assessment)
- She agreed to test regularly 3x day (not at noon) using one meter and to give insulin regularly
- Agreed Mom could record the glucose results
- We could not adjust insulin at visit because there was too much insulin omission



# Case 1

- Shown how to use syringes to mix morning insulin to avoid two injections with pens
- Mom was advised to set limits on the computer time and supervise insulin when at home
- If these interventions do not work, we will consider home care to supervise insulin administration BID at breakfast and supper



# Two Week Nurse Visit F/U

- Record book was being kept, no insulin omission
- Insulin adjustments made in clinic
- Encouraged for efforts in testing and giving insulin
- Still up at night on computer and missing school
- Will see in 2 weeks again
- Referred to psychology to deal with mood issues (not currently suicidal)



# Ongoing Follow-up:

- With frequent visits, log book kept and insulin given, feeling better
- With better glucose control “She is a different kid!”
- Plan
  - Mom to fax every 2 weeks
  - Clinic visits monthly
- Stuck with the plan



# Progress

- Attending school
- Has new boyfriend who supports her
- Diabetes control more important to her now
- Responded well to positive reinforcement
- Continues to need close follow up to maintain diabetes control



# The Long Haul

- This process continued with its ups and downs over a 2 year period
- A1C      14.3    April /06 – frequent nurse visits  
            8.9    Nov/06    - d/c n/v, regular 3 mo appt  
           11.3    Feb/07 – resumed frequent n/v  
            9.9    Sept/07 – faxing log book monthly  
            9.1    Dec/07  
            7.9    March/08 – almost at goal!  
            9.1    Nov/08  
            7.6    Feb/09



# When Faced with High A1c's or Recurrent DKA...

## We Explore Possible Contributors

- Recent illness
- Meter calibration
- Lab error
- “Fudging” data
- Physiology of puberty
- Parental supervision
- Parental support
- Feelings re: highs/lows
- Parental/child response to highs
- Finances



# We work with the Family First

- Expanded definition of patient includes the whole family
- Parental observation/ close supervision
- Social work assessment and problem solving
- Frequent phone and clinic follow-up  
(nurse/dietician visits to review log book and adjust insulin, offer encouragement)
- Address medical or psychosocial issues as we are able



# Home Care Support

- Supervision of insulin and BGM
- Recording blood sugars and faxing to diabetes clinic for insulin dose adjustment
- Relieve tension between parent and teen
- Organizing the family's routine around the diabetes care
- Continuing diabetes education



## Case 2

- 14 year old female, non compliant with diabetes care, A1C 18.4, profound weight loss, DKA x 3
- Lives with Mom but gets little support for diabetes care
- Mom does bring her to clinic as scheduled
- Tried home care visits to supervise insulin, but she would not be at home for visit
- Frequent social work/nurse visits with clinic



## Case 2

- Suggested admission, teen refused, and mom agreed to supervise insulin.
- 2 weeks later came asking for admission
- Admitted and insulin dose established (BID)
- Started to gain weight, feeling better
- Continued frequent clinic visits, and close monitoring
- Weight has increased, and teen encouraged by this.
- A1c 3 mos 17, 4mos 16.4; 6 mos 13.8



# What We Have Found:

- Frequent contact is valuable to the ongoing care for some children with diabetes
  - Educate newly diagnosed patients
  - Help reduce hospital admissions and episodes of DKA with close follow up and flexible availability
  - Involve community agencies
  - Assist family in coordinating all aspects of diabetes care
- Goal is ultimately the family or teen becomes independent...




## Points to Remember:

- Treat teens with **RESPECT** just like you would an older patient
- **Acknowledge** that diabetes is difficult and does interfere with day to day activities
- **Negotiate** with them what they would be willing to do
  - Make a **Plan with them**
- Set small achievable **Goals**
- **Give Positive Feedback!**



## Encourage parents to remain involved

- “In recent family studies, it has been documented that there is an erosion of parental involvement and support for diabetes management tasks over the early years of adolescent years”  
Anderson et al, 1999



# Stick with it – Time helps

- When I was a boy of fourteen, my father was so ignorant I could hardly stand to have the old man around. But when I got to be twenty-one, I was astonished at how much he had learned in seven years.  
~Mark Twain, "Old Times on the Mississippi" *Atlantic Monthly*, 1874



QUESTIONS?????