Type I Diabetes

- 700,000 Americans diagnosed
- 10-40% of females with Type I have co-occurring eating disorder
  - 35,000-140,000 affected with both
  - 2.5x higher than adolescents without DM
- Vastly underdiagnosed and late in the course
Diabetes Diagnosis

- Weight loss 10-15%
- Polyphagia, polydipsia
- Rapid weight gain once insulin utilized
- Very quickly learn the relationship between blood sugars, insulin and weight manipulation
- Diabetes education emphasizes nutrition, carb counting, insulin calculations
Our Experiences

More than “diabulimia”
- Insulin omission alone
- Renal purging occurs when BS > 180 mg/dL
- Results in rapid weight loss through urine
- HbA1c >10%, frequent DKA, significant weight loss

Most patients use multiple ED behaviors
- Binging, purging (emesis/insulin manipulation) restricting, Night Eating disorder, exercise
- Fit into Binge Eating Disorder/Bulimia rather than AN
- Impact of binge/purge cycle
  - Catecholamines-hyperglycemia
Incidence of Eating Disorders with Diabetes

- 12 years -1%
- 15 years – 14%
- 19 years - 34%
- At 4 year follow-up resilience of ED 60%
  (Rydall, 2002)
Diagnosis

- Requires high index of suspicion
- +/-Frequent hospital admission
- HbA1c may be <10%
- Low BMI typically not a feature
- Should be considered in females >10 years old
  - Male incidence unknown
- Standard ED questionnaires not appropriate
Diabetes Combined with Eating Disorders

- Diagnostic signs:
  - Repeated admission to the hospital for DKA
  - Frequent and erratic hypo- and hyperglycemia
  - HbA1c inconsistent with logbook blood sugars
  - Repeated “flu-like” symptoms
  - A1c higher than optimal despite reported good adherence
  - Abnormal growth/puberty
  - Body weight 15% below expected for age/height
  - Abnormal/absent menstrual cycles
  - Early onset of diabetes complications
DM/ED Screening

1. How do you feel about your body, weight, and shape?
2. Tell me about your current weight and about your ideal weight.
3. Tell me about the times you feel you are eating too much or too little.
4. Do you ever feel guilty about the food you eat? Please explain.
5. How does insulin affect your weight? How do you feel after you take your insulin?
6. How often do you think about your weight?
7. How often do you give less insulin than your food and blood sugar require?
8. Do you vomit, use laxatives, diuretics or excessive exercise to control your weight?
9. Are there conflicts surrounding your diabetes at home?
10. Tell me about the times your parents/significant other have been concerned about your weight or eating habits.
11. Is losing weight important to you?
12. Do you feel in control of your eating?

Warning signs of Type 1 DM combined with eating disorders:

- Overall deterioration in psychosocial functioning
- Increasing neglect of diabetes management
- Erratic clinic attendance
- Significant weight gain or weight loss
- Increased concerns about meal planning and food composition
- Depressive symptoms (sad mood, low energy, poor concentration, fatigue, disrupted sleep)
- Multiple episodes of DKA
- Poor or worsening metabolic control
Diabetes Combined with Eating Disorders

- Impact of blood sugars on CNS
  - High BS’s chronically result in low energy, mood
  - “fogginess” in the brain
  - Lack of focus and attention
  - Emotional blunting
  - Fear of weight gain
  - Poor self care

- With lowering of BS’s, focus and concentration improve, increased awareness of diabetes and psychological issues occurs
Complications on admission to RTC

- ~40% had microalbuminuria
- ~20% had retinopathy
- 100% had evidence of gastroparesis
- ~50% had significant peripheral edema
- 100% amenorrheic
- ~25% hypothyroid
- ~25% celiac disease
Blood sugars must be lowered before eating disorder and psychological issues can fully be addressed.

Goal is to slowly decrease BS’s over time:
- ~10 mg/dL BS decrease each week
- 1% HbA1c decrease every 3 weeks

Risk of initiating or worsening diabetes complications such as retinopathy, neuropathy, gastroparesis

Edema is a significant issue before and during lowering of blood sugars.
Treatment

- Treatment team includes psychologist experienced in ED as well as diabetes, dietitian, endocrinologist with ED experience, 24 hour nursing care
- Initial treatment inpatient with ultimate transition to residential treatment center
- Blood sugar monitoring 8-10x day
- Insulin therapy-all doses supervised by nurse
  - Injections vs insulin pumps
  - Monitor very carefully for possible manipulation, sabotage, self harm
  - Gradual increase in patient responsibility
- Diabetes education
Complications

- Retinopathy, neuropathy and gastroparesis onset more rapid and earlier in the course of DM (5-7 years vs 20-30 years)
- Mortality rate – up to 36%
  - Typically after ED resolved
- Once hyperglycemic fogginess dissipates, underlying psychological issues may fully emerge
- Risk of self harm
  - Overdosing insulin
  - Miscalculation of carbs’s
  - Intentional hypoglycemia episodes
- Weight gain
  - Generally minimal unless initially under IBW
Conclusions

- DM combined with eating disorder can yield a catastrophic outcome leading to poor metabolic control, growth and pubertal delay, recurrent episodes of diabetic ketoacidosis and hospitalization, earlier and more severe diabetes related complications and premature death

- Increasing awareness in healthcare professionals is imperative

- Treatment must be undertaken in centers experienced with diabetes and ED with 24 hour nursing care, experienced endocrinologists, psychologists, psychiatrists, general medical care physicians and emergency care availability
Areas of Interest and Research

- Developing DM/ED questionnaire
- Comorbidities of DM/ED (celiac, osteoporosis, fertility, etc.)
- Long term recovery rates
- Long term DM complications
- ETC., ETC.
Eating disorders are self defining and self destructive.

So too is “non-compliance” for many patients with DM.
The Psychological Integration of Diabetes and Eating Disorders

- Diabetes has the potential to pull families together or to pull them apart.
- Families come prepared, unprepared or contra-prepared to deal with the fallout of diabetes and its management.
- Parents who become obsessed with control breed either rebellion or dependence.
- Parents who abdicate involvement or prematurely turn over too much responsibility are courting disaster.
Parents who respond to their child’s poor choices, impulsivity, irresponsibility and frank dishonesty with warmth and caring are very weird.

Warmth and caring in response to bad decisions with potentially catastrophic consequences is not normal.

When we are afraid and our well being is tied to the behavior of another, it is normal to be critical, angry, disappointed and blaming.

When we are afraid, we are reflexively coercive and punitive.

Regardless of our motivations, our kids experience us at best as overly anxious; at worst, as negative and rarely as caring.
The family manages DM as a way to achieve other life goals, disease management is not a goal in and of itself.

Family concerns are expressed through warmth and empathy-praise and appreciation outweigh criticism and punishment.

DM responsibilities are shared, then gradually transferred for the right reasons.

Parenting communication is frequent, constructive, and mutually respectful.
Eating Disorder Family Styles

Tiemeyer (2009)

- The Perfect Family
- Overprotective Family
- Chaotic Family
- Enmeshed Family
- Disengaged Family
- Struggling Marriage
- Parentified Child
- Sexual Abuse
- Passive Parenting
- Overly Controlling
Depression

There is a significant confound concerning depression and DM

- There is the psychological toll of managing this relentless chronic illness
- There is the physiologic impact of chronically high BS’s that mimic symptomatology of major depression
- We believe that it is important to resist the temptation to medicate before answering this question through improved metabolic control
- Very few patients are actively suicidal; almost all are passively so
Mental health professionals who work with diabetes or any other chronic condition must acquire a basic knowledge of the disease and underlying disease process in order to facilitate medical treatment of the chronic disease and to effectively intervene with the chronic illness.

Countertransference—as providers we must look deeply into our own blindspots and search for biases and understand with clarity our own history and feelings about health, illness, disease, death and chronic illness.
First and foremost, members of the treatment team must thoroughly understand eating disorders and diabetes mellitus given that every intervention has a systemic and simultaneous impact on both the eating disorder and diabetes.

Recognition that both eating disorders and noncompliant behavior are all at once self-defining and self-destructive.

No intervention with these patients can possibly succeed outside this awareness.
Chronic Disease vs. Chronic Illness

- Chronic disease is an objective process, a disease entity, with an identifiable organic pathophysiology.
- Chronic illness is a subjective process. It is the unique and individual impact of a disease on the person and his/her life. It is the social, emotional, intellectual, interpersonal and spiritual experience; an experience of living with the disease.
Phases of Chronic Illness
Fennell (2003)

- **Phase I- Crisis Phase**
  - Crisis, turmoil and disbelief
  - Addressing the crisis, naming the illness, allowing oneself to be cared for, consoled and educated

- **Phase II- Stabilization Phase**
  - A plateau of symptoms is reached and an intellectual understanding is obtained, yet the patient still attempts to live their pre-illness life which is routinely punished
  - Patient begins to restructure life patterns, perceptions and expectations
Phase III - Resolution Phase

- A settling of symptoms and setbacks
- Patient sees an illness pattern and patterns other people’s responses to it
- Initial acceptance that one’s pre-illness life will not return
- There’s a need to develop a new sense of self and a personal philosophy of life consistent with this new understanding and these new limitations
Phase IV - The Integration Phase

- The patient integrates parts of old life and the chronic illness into their new life and new self-concept
- The patient strives to achieve the highest level of wellness and well-being in terms of their emotional, physical, spiritual and occupational functioning
We must resist this invitation because both sets of behavior are meeting unmet and deepest needs for autonomy, intimacy, emotion regulation and self cohesion.

Patients inevitably enlist us to hate, attack and attempt to destroy their eating disorder symptomatology and their noncompliant behavior.

Members of the treatment team must understand that these patients have literally grown up in the healthcare system and relate to all providers as narcissists.