**GLYCOGRASIA / HYPERGLYCEMIA**

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>High levels of glucose in serum or urine can be an indication of acute crisis (ketoacidosis) or serious chronic problems (diabetes, cardiovascular risks, poor wound healing, susceptibility to infection). Abnormal glucose test results can present in individuals who have been previously diagnosed with diabetes or in individuals whose diabetes status is unknown. This protocol is designed to provide guidelines in management of people who are found to have abnormally elevated glucose levels.</th>
</tr>
</thead>
</table>
| SUBJECTIVE | May include:  
1. History of diabetes or gestational diabetes.  
2. History of risk factors for diabetes (family history, etc.).  
| OBJECTIVE | May include physical findings consistent with:  
1. Poorly controlled diabetes (infection, neuropathy, poor perfusion).  
2. Risk factors for diabetes (obesity).  
3. Insulin resistance (acanthosis nigricans). |
| LABORATORY | Must include at least one of the following:  
1. Serum glucose levels:  
   a. Fasting: >200  
   b. Random: >400  
2. Glucosuria >2+ with or without ketonuria. Note: If ketones >2+, consult MD.  
3. Hemoglobin A1C > 6.5. |
| ASSESSMENT | Poorly controlled diabetes/prediabetes. |
| PLAN | 1. If patient is pregnant, see *Diabetes in Pregnancy Testing* protocol.  
2. If glucose >400 mg/dL, management depends upon time since testing and patient symptoms.  
   a. If patient is symptomatic, refer to ER immediately.  
   b. If specimen was drawn within the previous 4-6 hours, refer patient to ER.  
   c. If specimen is older and it is possible to retest, do so, using point of care test of serum glucose or urine dipstick. Refer to ER if repeat serum >400 or if urine glucose 4+.  
3. For men and nonpregnant women with known diabetes.  
   a. If random glucose is 140 – 400, FBS > 126 or urine glucose ≥ 2+, review use of recommended therapies including medication, diet and exercise.  
      1) If patient has not taken medication, advise patient to take now.  
      2) If patient has followed all instructions, consult with MD for advice about possible changes.  
   b. If hemoglobin A1C > 6.5, advise that diabetes is not adequately controlled. Refer to MD for control.  
4. For men and non-pregnant women, without known diabetes:  
   a. If random glucose is 200-400, FBS > 126 or hemoglobin A1C > 6.5, advise patient of new diagnosis of diabetes and refer for further evaluation.  
      1) Recommend appropriate ADA diet.  
      2) Encourage exercise.  
   b. If current glucose is 140-200, FBS 100-126, hemoglobin A1C ≥ 5.7 – 6.5 or urine glucose 2+:  
      1) Diagnose prediabetes.  
      2) Consider formal testing for diabetes in 2hGTT.  
      3) Recommend appropriate diet and exercise or refer to MD.  
5. Women with uncontrolled diabetes must be protected from pregnancy. Provide safe and highly effective contraception. |
| PATIENT EDUCATION | 1. Reinforce the need for good glucose control.  
2. Reinforce healthy lifestyle changes including appropriate diet and exercise. |
| REFER to MD/ER | 1. All patients with glucose levels above local alert levels.  
2. All newly diagnosed diabetics.  
3. All pregnant diabetic women with poor glucose control. |