ASTS 8th Annual Fellows Symposium
Pancreas & Immunology Case Studies
Friday, October 17, 2014

Case #1
42 y/o male with IDDM since age 12 and ESRD requiring HD for the past 3 months. HA1C is 7.5 and he takes 20 units lantus daily with a sliding scale. Other complications from DM include retinopathy, neuropathy and gastroparesis. He makes 1-2 cups of urine daily. He walks daily but gets short of breath after 1 block. His femoral pulses are palpable while his pedal pulses are not. His BMI is 28. His C-peptide is undetectable and anti-GADab is positive. He has 2 potential living kidney donors. He is interested in kidney and pancreas transplant.

- Is he a transplant candidate? For kidney, pancreas, or both?
- Is any further workup necessary?
- Do you recommend SPK, LRRT then PAK or LRRT alone?
- If his insulin requirements were >100 units daily would this change your recommendation?

Case #2
For each of the following donors, indicate whether you would use the pancreas for all candidates; refuse for all candidates, or use only for certain candidates or transplant types (SPK,PAK,PTA):

- 22 y/o woman, COD trauma, BMI 25, no PMH. Normal amylase/lipase/glucose, creatinine 2.0, requiring moderate doses of levophed, vasopressin. Intraop: moderate retroperitoneal edema.
- 34 y/o man, BMI 34, COD cerebral hemorrhage, no PMH. Normal amylase/lipase, creatinine 1.5. Requiring 1u/hr insulin, HbA1c 5.8. Hemodynamically stable. Intraop: moderate peripancreatic fat.
- 50 y/o man, BMI 28, COD trauma, PMH 3 yr HTN, heavy drinking history. Amylase/lipase/glucose normal. Creatinine 1.3. Hemodynamically stable.
- 30 y/o woman, BMI 30, COD CVA, no PMH. 15 min downtime, now stable. Amylase 600, lipase 450, Creatinine 1.2. Has required 8u insulin/24 hr.
- 28 y/o man, DCD, BMI 25, COD trauma, no PMH. Normal amylase/lipase/glucose, Scr 1.2. Hemodynamically stable.
- 22 y/o man, COD trauma, BMI 25, no PMH. Normal labs and hemodynamics. Has history of IV drug use – last known use 1 week ago, no track marks. Serologies and NAT testing are negative.

Case #3
29 y/o woman s/p SPK 6 weeks ago is seen in clinic for routine follow up. She complains of decreased appetite, nausea and mild abdominal discomfort. She has lost 5 kg since discharge. Her vitals are HR 95, BP 92/58, and RR 12/min. On exam her abdomen is mildly distended and tender in the RLQ without peritoneal signs.

Labs include fasting glucose of 185, creatinine of 1.8 (1.2 week prior) and serum amylase 115 and lipase 138. She is on tacrolimus/mycophenolate/prednisone and her tacro levels have ranged from 4-16 (most recent 8).

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- What is your differential diagnosis?
- What workup would you do?
- What is your management plan?

Case #4
45 y/o man with type I DM and s/p living related renal transplant 2 years prior. He is called in for PAK transplant after an appropriate donor pancreas is accepted. He has good renal graft function. He has a history of atrial fibrillation and is on aspirin 325mg and warfarin with an INR of 2.0.

- Do you reverse his anticoagulation? If so, how?

During the operation he has significant oozing not responsive to various hemostatic measures and he gets 2 units FFP and 2 unit PRBC. The operation is otherwise unremarkable. The kidney continues to make urine and the glucose normalizes after reperfusion.

- Do you leave a drain? If so, what are your criteria to remove it?
- Do you anticoagulate post-op? If so, what drug do you use? When do you start?
- Would your answer be different if there was no intraoperative bleeding?
- Do you continue anticoagulation after discharge?

Case #5
48y/o woman with DM1 s/p living donor renal transplant 2 years ago, cPRA 45%, induced with anti-thymocyte globulin and maintained on tacrolimus and mycophenolate is now offered a pancreas after kidney from a suitable 25y/o donor. The recipient has a historic DSA to DR2 with negative flow T- & B-cell crossmatches.

- Would you accept this organ for this patient?
- Would you use an induction agent? If so, which agent would you choose?
- Would you alter the patient's maintenance immunosuppression?
- Would you change your immunologic follow-up in any way?

The patient does well for the first 3 months post-transplant but then presents with elevated amylase and lipase levels but a normal glucose. Her creatinine remains normal.

- What is your differential?
- How would you evaluate the patient?
- What are your indications for pancreas allograft biopsy?
- How would you diagnose and treat antibody-mediated rejection of the pancreas?