Treatment Challenges with Obesity Therapy

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** Obesity Treatments: Risk/Benefit **

### % Total Body Weight Loss at 1 Year

<table>
<thead>
<tr>
<th>Treatment</th>
<th>% TBWL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity Rx</td>
<td>-5.0</td>
</tr>
<tr>
<td>AntiT2DM Rx</td>
<td>-1.8</td>
</tr>
<tr>
<td>Aspire</td>
<td>-12.0</td>
</tr>
<tr>
<td>IGB</td>
<td>-7.0*</td>
</tr>
<tr>
<td>VBLOC</td>
<td>-9.0</td>
</tr>
<tr>
<td>LAGB</td>
<td>-10.0</td>
</tr>
<tr>
<td>RYGB/LSG</td>
<td>-30.1</td>
</tr>
</tbody>
</table>

### Serious Complication Rate %

<table>
<thead>
<tr>
<th>Treatment</th>
<th>% Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity Rx</td>
<td>1.0</td>
</tr>
<tr>
<td>AntiT2DM Rx</td>
<td>9.0</td>
</tr>
<tr>
<td>Aspire</td>
<td>3.6</td>
</tr>
<tr>
<td>IGB</td>
<td>4.0*</td>
</tr>
<tr>
<td>VBLOC</td>
<td></td>
</tr>
<tr>
<td>LAGB</td>
<td>1.0</td>
</tr>
<tr>
<td>RYGB/LSG</td>
<td>21.0</td>
</tr>
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</table>

**Increased invasiveness of intervention**

- Orlistat
- Lorcaserin
- Phentermine/topiramate
- Oral Anti-diabetes Meds (e.g. MET, SU) Injectables (i.e. GLP-1, insulin)
- Endoluminal weight loss device
- Intra-gastric Balloon *6 mo results
- Implanted pacemaker-like device
- Laparoscopic Adjustable Gastric banding
- Roux-en-Y Gastric Bypass
- Laparoscopic Sleeve Gastrectomy

Gaps Between 2013 Obesity Treatment Guidelines and Actual Practice

Guideline Recommendations

1. **Use BMI** to identify risk; advise patients of their risk

2. **Use waist circumference** to identify risk; advise patients of their risk

3. 3%-5% sustained weight loss reduces risk factors and risk of diabetes

4. Prescribe set # of calories per day

5. There is no ideal diet

6. Advise adults with obesity who meet criteria: **surgery may be an option**

Actual Practice

- Clinicians often fail to diagnose overweight and obesity or discuss weight management with patients
- <1% of US adults with severe obesity undergo bariatric surgery annually; low MD referrals due to:
  - Biggest reason at VA: lack of training
  - Provider attitudes
  - Costs/lack of reimbursement
  - Fear of complications
  - Lack of time to counsel patients

2013 AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults
Vast majority of evidence has focused on the observation that African Americans tend to lose less weight in clinical trials compared to non-Hispanic whites. Due to a complex interplay from physiologic drivers of energy imbalance to access to care and treatment responses.

At 2 years after RYGB, A1c levels remained stable in Caucasian and Hispanic Americans; however, African Americans had a significant increase. These racial differences in A1c could not be explained by the smaller weight loss in AA patients.

Whites lost more weight (39 +/- 8%) than African Americans (26 +/- 10%) (p < 0.05) after gastric bypass. Our data are consistent with previous reports implicating metabolic differences between the two racial groups.

General agreement in the literature that AA are more insulin resistant than NHW with similar clinical and anthropometric characteristics. Greater insulin secretion in AA is the a priori defect contributing to worsening insulin resistance in T2D development/progression.

How should the disparities in treatment outcomes be addressed? Constellation of risk factors should be treated in a differential manner with combinations of nutrition, physical activity and medications, devices and surgery.

## Disparities: Treatment Challenges

### Future Needs:

<table>
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<tr>
<th>Preponderance of evidence is focused on racial/ethnic differences, primarily African American vs non-Hispanic white patients</th>
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</thead>
<tbody>
<tr>
<td>Studies that include race/ethnic minority groups</td>
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<tr>
<td>Studies across socially-distinct groups of patients: rural, mental illness, alternative lifestyles</td>
</tr>
<tr>
<td>Develop standards for “culturally appropriate”/“cultural tailored” care</td>
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<tr>
<td>Determine strategies that improve access to care of underserved populations</td>
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<tr>
<td>Explore social and physiologic factors related to treatment outcomes for non-behavioral therapies, such as medication and bariatric surgery</td>
</tr>
<tr>
<td>Clinical trials that compare physiologically adapted dietary and exercise prescriptions for different race/ethnic groups, as well as studies of genetic admixture as a marker and potential screening tool to direct personalized treatment strategies</td>
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Challenges and Opportunities

Barriers to effective treatment
• Lack of training for clinicians
• Lack of time to counsel
• Cynicism about treatment effectiveness
• Lack of patient motivation to lose weight
• Lack of reimbursement
• Inadequate resources to care for patients over time

How can we improve the clinical treatment of obesity?
• Include BMI as a fifth vital sign
• Add BMI to patient chart
• Scales that report BMI
• Include specific diet or exercise tips in patient chart
• Medical equipment in office appropriate for patients with obesity

How do we improve capacity for treatment?¹
• Increase training and practice-based changes
• Accessibility for those with lower SES status to obtain medications devices lifestyle therapies – coverage by third party payors is CRUCIAL

Suggested proposed key policy initiatives
For patients at risk or high risk for obesity or comorbidities:
• Preventive programs to include physical activity programs, gym memberships, nutrition classes, food pantry and food demonstration kitchens
• Lifestyle treatment programs to include internet and phone call strategies, anti-obesity medications, early referral to bariatric surgery programs
• Head Start Programs for children at risk of obesity/parents with obesity