GLP1-RAs and Eating Disorders

Susan L. McElroy, MD

Chief Research Officer, Lindner Center of HOPE Professor of Psychiatry & Behavioral Neuroscience University of Cincinnati College of Medicine Cincinnati, Ohio

Disclosures 2024

Grant Support

Axsome, Marriott Foundation, Neurocrine, Novo Nordisk

Consultant/Ad Board

Axsome, Kallyope, Novo Nordisk

<u>Speakers' Bureau</u>

NONE

Financial Interest / Stock ownership / Royalties NONE

DSM-5 Feeding and Eating Disorders

Pica

- Rumination Disorder
- Avoidant/Restrictive Food Intake Disorder (ARFID)
- Anorexia Nervosa
- Bulimia Nervosa
 - Associated with obesity
- Binge-Eating Disorder
 - The MOST COMMON
 - Strongly associated with obesity

Other Specified Feeding or Eating Disorders

- Atypical Anorexia Nervosa
 - Individuals may have overweight or obesity
- BN of low frequency and/or limited duration
- BED of low frequency and/or limited duration
- Purging Disorder
- Night Eating Syndrome
- NOT in DSM-5/associated with obesity:
 - Food Addiction
 - Antipsychotic-Induced Binge Eating
 - Hyperphagia/Polyphagia

Weight Loss Drugs in BED

- D-fenfluramine, sibutramine, rimonabant—all effective but removed from the market
- FDA-Approved
 - Bupropion-naltrexone
 - 1 positive open-label trial
 - 1 ongoing RCT
 - Liraglutide injection 3 mg/d
 - 1 positive pilot study using 1.8 mg/d
 - 1 RCT-weight loss but no effect on BE
 - Orlistat
 - Weight loss but effects on BE mixed
 - Phentermine-topiramate
 - 1 positive RCT (crossover)
 - 1 ongoing trial

Liraglutide (1.8mg) vs TAU in 44 individuals with binge eating and obesity but without diabetes

	Liraglutide (n=21)			Control (n=21)		
	Baseline	After 12 weeks	p*	Baseline	After 12 weeks	p*
BES	20 (18–27)	11 (7–16)	<0.001*	22 (20–28)	18 (12–22)	<0.001*
Body weight (kg)	94.54±18.14	90.14±19.70	<0.001	92.33±14.68	91.57±16.32	0.343
BMI (kg/m²)	36.15 ± 3.84	34.40 ± 4.77	<0.001*	35.74 ± 4.55	35.46 ± 5.38	0.329

Liraglutide 3.0 mg/d vs Placebo for BED with BMI >27 (n=27)



	Liraglutide	Placebo	Р
% Weight Change	-5.1	-0.9	0.005

A Randomized, Placebo-controlled Study of Liraglutide 3mg/d (Saxenda®) in Patients with Stable Bipolar Disorder and Obesity or Overweight



Primary outcome measure: Percent weight change

Secondary outcomes:

	Diff. [95% CI]	sd	p-value	d⊳
Weight, kg	3.8[1.0, 6.5]	5.19	<0.01	0.73
BMI, kg/m²	1.3[0.4, 2.3]	1.85	<0.01	0.70

Effect of Liraglutide on Eating Behavior

Change from Baseline to Endpoint in Assessments Related to Eating Behaviors



GLP-1RAs in Eating Disorders: Preliminary Conclusions

- May be helpful for BED, including BED induced by antipsychotic medication and BED with normal weight, possibly BN and hyperphagia
- May worsen AN, Atypical AN, ? Other disorders characterized by dietary restriction
- Evaluate persons with obesity for eating disorders, other psychiatric disorders
- Future research, including RCTs in BED, greatly needed



Questions or Comments?