GEMs
GOOD EVIDENCE MATTERS

GEMs of the Week

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What's in this week's issue?

Week of October 23 - 27, 2023

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Is the Mirena Effective and Safe for Eight Years?

GEMs GOOD EVIDENCE MATTERS SPOTLIGHT

Contraceptive Efficacy and Safety of the 52-mg Levonorgestrel Intrauterine System for Up to 8 Years: Findings from the Mirena Extension Trial

Jensen JT, Lukkari-Lax E, Schulze A, Wahdan Y, Serrani M, Kroll R. Contraceptive efficacy and safety of the 52-mg levonorgestrel intrauterine system for up to 8 years: findings from the Mirena Extension Trial. *Am J Obstet Gynecol*. 2022 Dec;227(6):873.e1-873.e12. doi: 10.1016/j.ajog.2022.09.007. Epub 2022 Sep 9. PMID: 36096186.

KEY TAKEAWAY: The 52 mg levonorgestrel-releasing intrauterine system (LNG-IUS) maintains safety and contraceptive efficacy up to eight years after insertion.

STUDY DESIGN: Multi-center, single-arm, observational study

LEVEL OF EVIDENCE: STEP 2

BRIEF BACKGROUND INFORMATION: Close to one in six women of reproductive age use an intrauterine contraceptive system. The intrauterine system is a well-established, reversible, and highly effective form of contraception. The 52 mg LNG-IUS specifically, or Mirena, is approved for use for up to five years as a contraceptive. It would be beneficial from a clinical, economic, and gender-equality perspective to extend the use of IUS.

PATIENTS: Users of LNG-IUS for 4–5 years

INTERVENTION: Continued use of 52 mg LNG-IUS for 6–8 years

CONTROL: Not applicable

PRIMARY OUTCOME: Pregnancy, uterine perforation, significant bleeding, pain

METHODS (BRIEF DESCRIPTION):

- Participants were fertile women 18–35 years old who were current users of LNG-IUS for 4.5–5 years for contraception or contraception plus heavy menstrual bleeding (HMB) and were willing to continue use through eight years.
- Some of the exclusion criteria include patients with suspected pregnancy, abnormal pap smear, menopause, bleeding, and other conditions.
- Subjects followed up every six months to confirm the continued presence of LNG-IUS, check for pregnancy, and assess for adverse events.
- Some adverse events and treatment-emergent adverse events (TEAEs) include pain, bleeding, infection, discomfort, mood disturbances, and breast swelling.
- Intensity of bleeding was recorded by participants via an electronic diary.
- Healthcare providers assessed the ease of device removal.
- Follow-up calls were done for 12 months after treatment discontinuation to monitor the occurrence of pregnancy and return to fertility.
- The effectiveness of LNG-IUS was assessed using the Pearl-Meier index, the number of pregnancies per 100 woman-years.
- The effectiveness of LNG-IUS was also assessed using the probability of getting pregnant based on the Kaplan-Meier method, to determine the cumulative failure rate.

INTERVENTION (# IN THE GROUP): 362

COMPARISON (# IN THE GROUP): Not applicable

FOLLOW-UP PERIOD: Three years

RESULTS:

Primary Outcome –

- The three-year Pearl-Meier index within LNG-IUS usage in years 6–8 was 0.28 (95% CI, 0.03–1.00).
- The cumulative failure rate for LNG-IUS usage in years 6–8 was 0.68%, consistent with results for LNG-IUS usage in years 1–5 (95% CI, 0.17–2.7).
- Two pregnancies were detected.
  - A pregnancy of undetermined location (spontaneous resolution) occurred in year six of LNG-IUS usage.
  - An ectopic pregnancy (methotrexate) occurred in year seven of LNG-IUS usage.
  - The LNG-IUS was removed in both pregnancies.
- 249 had treatment-emergent adverse events, 65 related to LNG-IUS, most commonly bleeding or pain-related.
- 139 patients withdrew prematurely, with the primary reason being the desire for pregnancy.
- Satisfaction in participants who completed the study was 87% based on intention to treat.
- Menstrual bleeding patterns remained similar throughout the study and overall.

LIMITATIONS:

- There was no control group.
- There was a small sample size for heavy menstrual bleeding.
- There was a small sample size for return-to-fertility analysis.

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LAAC Safety and Efficacy vs OAC for Patients with Nonvalvular AF

Left Atrial Appendage Closure vs Oral Anticoagulants in Atrial Fibrillation: A Meta-Analysis of Randomized Trials

Turagam MK, Osmancik P, Neuzil P, Dukkipati SR, Reddy VY. Left Atrial Appendage Closure Versus Oral Anticoagulants in Atrial Fibrillation: A Meta-Analysis of Randomized Trials. *J Am Coll Cardiol*. 2020;76(23):2795-2797. doi:10.1016/j.jacc.2020.08.089

KEY TAKEAWAY: Left atrial appendage closure (LAAC) had similar rates of stroke in comparison to warfarin or non-vitamin K oral anticoagulants (NOACs) in patients with nonvalvular atrial fibrillation (AF). LAAC showed a significant reduction in both hemorrhagic stroke and non-procedure-related bleeding, largely in comparison to warfarin.

STUDY DESIGN: Systematic review and meta-analysis of three randomized clinical trials (N=1,516)

LEVEL OF EVIDENCE: STEP 1

BRIEF BACKGROUND INFORMATION: There has been a growing interest in utilizing percutaneous LAAC for stroke prevention in nonvalvular AF patients. Studies have been done comparing Watchman and Amulet devices to warfarin and NOACs, such as apixaban. This meta-analysis aims to review this data to determine the effectiveness and safety of the LAAC and oral anticoagulant (OAC) treatments for the prevention of cardiovascular and neurological events.

PATIENTS: Adults with nonvalvular AF

INTERVENTION: LAAC with the post-LAAC antithrombic regimen

CONTROL: Warfarin, NOACs, or aspirin +/- clopidogrel

PRIMARY OUTCOME: All-stroke/systemic embolism (SE), ischemic stroke/SE, major bleeding, and death

METHODS (BRIEF DESCRIPTION):

- Electronic databases were searched from inception until June 23, 2020, for RCTs comparing LAAC vs OAC in nonvalvular AF.
- The mean age of patients was 73.3 years old, with a CHA2DS2-VASc score of 4.1.
- In the OAC group, 65% received warfarin and 35% received NOAC.
- The PROTECT-AF and PREVAIL trials compared LAAC with Watchman (Boston Scientific, Marlborough, Massachusetts) to warfarin, while PRAGUE-17 compared Amulet (St. Jude Medical, St. Paul, Minnesota) and Watchman to apixaban as well as other NOACs.
- In the PROTECT-AF and PREVAIL, the post-LAAC antithrombotic regimen for patients was a regimen of warfarin for 45 days, then six months of daily clopidogrel and aspirin, and finally aspirin indefinitely.
- In PRAGUE-17, for 81.8% of patients, the regimen was aspirin in addition to clopidogrel for three months followed by aspirin indefinitely. The remaining 18.2% were placed on a regimen of apixaban varying from six weeks to three months, followed by indefinite aspirin.
- The LAAC device was successfully implanted in 93.3% of patients, while the remainder continued oral anticoagulation with either warfarin or NOAC. Watchman devices were implanted in 86% of patients, Amulet devices were implanted in 13.5%, and Watchman-FLX was implanted in 0.5%.
- 6.8% of LAAC patients experienced procedure-related complications such as pericardial effusion requiring intervention, vascular complications, major bleeding, stroke, device embolization, or death.

INTERVENTION (# IN THE GROUP): 933

COMPARISON (# IN THE GROUP): 583

FOLLOW-UP PERIOD: 38.7 months

RESULTS:

Primary Outcome –

- There was no significant difference in all-strokes/systemic embolism between the LAAC and OAC groups (risk ratio [RR] 0.98; 95% CI, 0.65–1.5).
- Oral anticoagulants were found to be less effective at preventing:
  - Hemorrhagic strokes (RR 1.48; 95% CI, 0.08–0.58)
  - Cardiovascular death (RR 0.65; 95% CI, 0.44–0.95)
  - All-cause death (RR 0.78; 95% CI, 0.62–0.99)
- LAAC was associated with a decrease in non-procedure-related major bleeding (RR 0.53; 95% CI, 0.38–0.74).

LIMITATIONS:

- There may be possible patient selection bias in the LAAC group.
- The three trials reviewed had open-label trial designs.
- There were noted differences in OAC utilized in each of the reviewed trials.
- There was noted variable follow-up length among the trials reviewed.

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Get Two Outs with One Pitch: CPAP Improves Both Obstructive Sleep Apnea and Resistant Hypertension

Efficacy of Continuous Positive Airway Pressure (CPAP) in Patients with Obstructive Sleep Apnea (OSA) and Resistant Hypertension (RH): Systematic Review and Meta-Analysis

Labarca G, Schmidt A, Dreyse J, et al. Efficacy of continuous positive airway pressure (CPAP) in patients with obstructive sleep apnea (OSA) and resistant hypertension (RH): Systematic review and meta-analysis. *Sleep Med Rev*. 2021;58:101446. doi:10.1016/j.smrv.2021.101446

KEY TAKEAWAY: CPAP therapy in individuals suffering from OSA and RH significantly improves blood pressure over 24 hours and at night.

STUDY DESIGN: Systematic review and meta-analysis of 10 randomized controlled trials (N=722)

LEVEL OF EVIDENCE: STEP 1

BRIEF BACKGROUND INFORMATION: RH is defined as uncontrolled blood pressure requiring multiple antihypertensive medications for management. Roughly 75-85% of RH patients report OSA, but it's uncertain whether CPAP therapy for OSA improves blood pressure in RH.

PATIENTS: Adult patients with OSA and RH

INTERVENTION: CPAP

CONTROL: Usual care, sham/suboptimal CPAP, pills

PRIMARY OUTCOME: Systolic blood pressure (SBP) and diastolic blood pressure (DBP)

METHODS (BRIEF DESCRIPTION):

- Patients' average age ranged from 55 to 61 years old (mean age, 58 years old) and were 65% male. Their BMI ranged from 29 to 46 (mean BMI, 31.7).
- Exclusion criteria:
  - Patients with other sleep disorders (e.g., central and mixed apnea).
  - Patients on bilevel-positive airway pressure (BiPAP) and oxygen.
- SBP and DBP were obtained via ambulatory blood pressure monitoring over 24 hours and subgrouped into daytime and nighttime blood pressure readings.

INTERVENTION (# IN THE GROUP): 362

COMPARISON (# IN THE GROUP): 360

FOLLOW-UP PERIOD: 8–24 weeks

RESULTS:

Primary Outcome –

- CPAP was significantly more likely to decrease 24-hour blood pressure than control.
  - SBP (8 trials, n=606; mean difference [MD] –5.1; 95% CI, –8.0 to –2.1; I^2=69%)
  - DBP (7 trials, n=550; MD –4.2; 95% CI, –6.5 to –1.9; I^2=81%)
- CPAP was significantly more likely to decrease nighttime blood pressure than control.
  - SBP (6 trials, n=526; MD –4.2; 95% CI, –7.0 to –1.3; I^2=43%)
  - DBP (6 trials, n=526; MD –2.0; 95% CI, –3.3 to –0.57; I^2=40%)
- CPAP did not significantly decrease daytime SBP and DBP.

LIMITATIONS:

- Patients had different stages of OSA ranging from moderate to severe.
- There were varying levels of compliance with CPAP therapy among the trials.
- There was a risk of bias since it would be difficult to blind patients from knowing whether they received CPAP or not.
- Treatment of hypertension in both control and intervention groups was not standardized.

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Losing Weight: Changing "-tides"

Triple-Hormone-Receptor Agonist Retatrutide for Obesity – A Phase 2 Trial

Jastreboff AM, Kaplan LM, Frías JP, et al. Triple-Hormone-Receptor Agonist Retatrutide for Obesity - A Phase 2 Trial. *N Engl J Med*. 2023;389(6):514-526. doi:10.1056/NEJMoa2301972

KEY TAKEAWAY: Retatrutide, a triple receptor agonist for glucose-dependent insulinotropic peptide (GIP)-glucagon-like peptide 1 (GLP1)- glucagon (GCG), dosed subcutaneously (subq) once weekly significantly reduces weight in those with obesity or overweight. Higher doses of retatrutide correlate with greater weight loss.

STUDY DESIGN: Double-blind randomized controlled trial

LEVEL OF EVIDENCE: STEP 2

BRIEF BACKGROUND INFORMATION: Obesity and its related health comorbidities are a burgeoning health crisis in the U.S., with one-quarter of the world population estimated to be obese by 2035. Recently, GLP1 agonists (e.g., semaglutide) have allowed patients to make inroads in the fight against obesity. New drugs such as retatrutide may present as an even more powerful new avenue to shed pounds.

PATIENTS: Obese and overweight adults

INTERVENTION: Retatrutide

CONTROL: Placebo

PRIMARY OUTCOME: % change in body weight at 24 weeks

Secondary Outcome: % change in body weight at 48 weeks

METHODS (BRIEF DESCRIPTION):

- Patients were 51.8% male with an average age of 48.2 years old (range, 18-75 years old).
- Inclusion criteria: BMI >30, or a BMI >27 but <30 and at least one weight-related health condition (e.g., hypertension, dyslipidemia)
- Exclusion criteria: diabetes, previous or planned surgical treatment for obesity, treatment with medication that promoted weight loss or gain, or a change in body weight of >5 kg within three months before screening.
- Randomized to the following seven groups:
  - Retatrutide 1 mg
  - Retatrutide 4 mg (2 mg initial dose)
  - Retatrutide 4 mg (4 mg initial dose)
  - Retatrutide 8 mg (2 mg initial dose)
  - Retatrutide 8 mg (4 mg initial dose)
  - Retatrutide 12 mg (2 mg initial dose)
  - Placebo
- All treatment groups received one subq injection weekly for 48 weeks.
- All participants received lifestyle counseling no matter which treatment group they were in.
- Body weight was assessed at 24 weeks and 48 weeks.
- A two-sided significance level of 0.05 was used to determine statistical significance.

INTERVENTION (# IN THE GROUP): 268

COMPARISON (# IN THE GROUP): 70

FOLLOW-UP PERIOD: 48 weeks of trial treatment, four-week safety follow-up

RESULTS:

Primary Outcome –

- Compared to the placebo group, each of the six retatrutide groups significantly reduced weight at 24 weeks.
  - Retatrutide 1 mg: least-squares mean difference [MD] –5.6% (95% CI, –7.3% to –3.9%)
  - Retatrutide 4 mg (2 mg initial dose): MD –10% (95% CI, –12% to –8.3%)
  - Retatrutide 4 mg (4 mg initial dose): MD –12% (95% CI, –15% to –10%)
  - Retatrutide 8 mg (2 mg initial dose): MD –15% (95% CI, –17% to –13%)
  - Retatrutide 8 mg (4 mg initial dose): MD –16% (95% CI, –18% to –14%)
  - Retatrutide 12 mg: MD –16% (95% CI, –18% to –14%)
- Compared to the placebo group, each of the six retatrutide groups significantly reduced weight at 48 weeks.
  - Retatrutide 1 mg: least-squares mean difference [MD] –6.6% (95% CI, –8.9% to –4.2%)
  - Retatrutide 4 mg (2 mg initial dose): MD –14% (95% CI, –18% to –11%)
  - Retatrutide 4 mg (4 mg initial dose): MD –16% (95% CI, –19% to –12%)

- Retatrutide 8 mg (2 mg initial dose): MD –20% (95% CI, –23% to –17%)
- Retatrutide 8 mg (4 mg initial dose): MD –22% (95% CI, –25% to –19%)
- Retatrutide 12 mg: MD –22% (95% CI, –25% to –19%)

LIMITATIONS:

- Most patients were White.
- No information regarding whether muscle/fat body composition changed was available.
- The study was funded by the pharmaceutical industry.

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When to Order Digital Breast Tomosynthesis in Women 40–79 Years Old

Association of Screening with Digital Breast Tomosynthesis vs Mammography with Risk of Interval Invasive and Advanced Breast Cancer

Kerlikowske K, Su YR, Sprague BL, et al. Association of Screening with Digital Breast Tomosynthesis vs Digital Mammography with Risk of Interval Invasive and Advanced Breast Cancer. *JAMA*. 2022;327(22):2220-2230. doi:10.1001/jama.2022.7672

KEY TAKEAWAY: Women with extremely dense breasts who are at high risk for breast cancer have significantly lower rates of advanced cancer over 12 months when screened with digital breast tomosynthesis (DBT) compared to women screened with digital mammography.

STUDY DESIGN: Retrospective cohort study (N=404,427)

LEVEL OF EVIDENCE: STEP 3

BRIEF BACKGROUND INFORMATION: DBT was developed with the hope of improving breast cancer screening efficacy in individuals with dense breasts. There is a lack of evidence to show a significant difference in interval cancer rates in those screened with DBT vs. digital mammography.

PATIENTS: Women 40–79 years old

INTERVENTION: Digital breast tomosynthesis

CONTROL: Digital mammography

PRIMARY OUTCOME: Rates of advanced cancer in a 12-month period following screening

METHODS (BRIEF DESCRIPTION):

- This study included women participants 40–79 years old with no breast cancer or mastectomy history who underwent breast cancer screening with digital mammography or digital breast tomosynthesis (DBT) from 2011–2018 at 44 US breast cancer surveillance consortium facilities.
- Main exclusion criteria included initial screening examinations, unilateral screening mammograms, and mammograms that were preceded by ultrasounds or breast MRIs.
- Women who underwent screening with digital mammography had their breast density characterized by radiology into one of the following categories: almost entirely fatty, scattered fibroglandular densities, heterogeneously dense, and extremely dense.
- Interval and advanced cancer rates were calculated in a 12-month period after screening.
- Breast density was assessed at each mammogram using the Breast Imaging Reporting and Data System (BI-RADS).
    - Density was rated on a scale of “almost entirely fatty” to “extremely dense”.
- The interval and advanced rates of cancer were compared between women who underwent digital breast tomosynthesis and women who underwent digital mammography.
- The interval invasive rate of cancer was calculated using the number of invasive cancers diagnosed within 12 months following a negative mammogram divided by the total number of mammograms.
- The total number of participants in the intervention vs comparison group was difficult to estimate as women in the study underwent multiple screenings using both modalities over the period of the study.

INTERVENTION (# IN THE GROUP): DBT only: 56,939

COMPARISON (# IN THE GROUP): Not available

FOLLOW-UP PERIOD: Total period of the study (2011–2018)

RESULTS:

Primary Outcome –

- Women with extremely dense breasts and high risk for breast cancer had significantly lower rates of advanced cancer over 12 months when screened with DBT compared to women screened with digital mammography (0.27 vs. 0.80; difference –0.53; 95% CI, 0.10–0.97)
- Interval invasive cancer rates were not significantly different for digital breast tomosynthesis vs. digital mammography when participants were not stratified by breast density and breast cancer risk.

LIMITATIONS:

- Criteria to triage women to digital breast tomosynthesis vs. digital mammogram were not specified.

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Magic Medicine: Psilocybin for Treatment Resistant Depression

Single-Dose Psilocybin for a Treatment-Resistant Episode of Major Depression

Goodwin GM, Aaronson ST, Alvarez O, et al. Single-Dose Psilocybin for a Treatment-Resistant Episode of Major Depression. *N Engl J Med*. 2022 Nov 3;387(18):1637-1648. doi: 10.1056/NEJMoa2206443.

KEY TAKEAWAY: It appears to take at least 25 mg of psilocybin to make a difference in response and remission rates for treatment-resistant depression.

STUDY DESIGN: Multi-site, double-blind, dose-finding, parallel-group randomized trial

LEVEL OF EVIDENCE: STEP 3 (downgraded due to lack of placebo and dose-finding trial)

BRIEF BACKGROUND INFORMATION: Failure of two courses of treatment has been used to define treatment-resistant depression. Studies comparing psilocybin with escitalopram have suggested therapeutic potential for psilocybin. This trial identifies an acceptable dose and assesses the safety of a synthetic proprietary formulation of psilocybin.

PATIENTS: Adults with treatment-resistant depression

INTERVENTION: Psilocybin 25 mg or 10 mg

CONTROL: Psilocybin 1 mg

PRIMARY OUTCOME: Depression severity at three weeks

Secondary Outcome: Depression response and remission

Safety Outcome: adverse events

METHODS (BRIEF DESCRIPTION):

- Participants were recruited from primary care, psychiatric services, and online advertisements, met criteria for diagnosis of treatment-resistant depression, and had current episodes of depression refractory to treatment (2–4 adequate trials of treatment).
- Participants were excluded if they had a history of schizophrenia or other psychotic disorder, substance abuse in the last year, suicide risk, or depression due to medical disease.
- Participants participated in a 3–6 week run-in period where depression and or central nervous system-affecting medications were weaned off, allowing at least two weeks free of medication before the start of psilocybin.
- Participants had a mean age of 39.8 years, an average of 6.9 lifetime depressive episodes, and 52.2% identified as female.
- The treatment group received a single dose of either 25 mg or 10 mg psilocybin and then were followed for 12 weeks.
- The comparison group received psilocybin 1 mg once orally.
- Primary outcome was depression measured via the Montgomery-Asberg Depression Rating Scale (MADRS) (0–60 with higher scores revealing more severe depression) at three weeks.
- Response and remission of depression were measured via MADRS: response was <50% of initial MADRS, remission was MADRS score <10 measured at 12 weeks.
- Screening for adverse events occurred at in-person and telephone visits.

INTERVENTION (# IN THE GROUP):

- 25 mg: 79
- 10 mg: 75

COMPARISON (# IN THE GROUP): 79

FOLLOW-UP PERIOD: 12 weeks

RESULTS:

Primary Outcome –

- At week three, patients treated with 25 mg of psilocybin had lower depression severity compared to those given 1 mg (–12 points vs –5.4, respectively; mean change –6.6; 95% CI, –10 to –2.9).
- At week three, there was no difference in depression severity in the 10 mg group as compared to the 1 mg group.

Secondary Outcome –

- At week three, patients treated with 25 mg of psilocybin had improved response rates compared to 1 mg of psilocybin (37% vs 18%, respectively; OR 2.9; 95% CI, 1.2–6.6).
- At week three, patients treated with 10 mg of psilocybin had no difference in response rate as compared to the 1 mg group.
- Sustained response rates were not significantly different.

- Adverse events occurred in 66 (85%) of the 25 mg group, 56 (75%) of the 10 mg group, and 57 (72%) of the 1 mg group on day one, most commonly headache (24%) and nausea (22%).
- Intentional self-injury occurred in three patients in the 25 mg psilocybin and none in the 1 mg group (NNH=26).

LIMITATIONS:

- The population of the study was largely homogenous population which may be different from the practice population.
- The trial protocol with a two-week run-off without therapy is not feasible in clinical practice.
- Supervisors of the study were paid by the drug-manufacturer.

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Bright Light Therapy in the Treatment of Perinatal Depression: Is It Effective?

Sustained Remission from Perinatal Depression After Bright Light Therapy: A Pilot Randomised, Placebo-Controlled Trial

Garbazza C, Cirignotta F, D'Agostino A, et al. Sustained remission from perinatal depression after bright light therapy: A pilot randomised, placebo-controlled trial. *Acta Psychiatr Scand*. 2022;146(4):350-356. doi:10.1111/acps.13482

KEY TAKEAWAY: Bright Light Therapy seems to be an effective and safe therapy option in the treatment of perinatal depression.

STUDY DESIGN: Multi-center, randomized, single-blind, placebo-controlled trial

LEVEL OF EVIDENCE: STEP 3 (downgraded due to small size and being single-blinded)

BRIEF BACKGROUND INFORMATION: Perinatal depression (PND) is a major mental health problem, especially important in the primary care setting due to its prevalence and the safety concerns of antidepressant treatment during pregnancy and breastfeeding. Bright light therapy (BLT) is known to be effective and safe in treating seasonal and non-seasonal depression and could address these pharmacological barriers in treating perinatal depression. Most existing studies on BLT are either for prenatal depression or postnatal depression.

PATIENTS: Pregnant women with perinatal depression

INTERVENTION: BLT

CONTROL: Dim red light (DRL)

PRIMARY OUTCOME: Remission of perinatal depression

Secondary Outcome: Safety of BLT

METHODS (BRIEF DESCRIPTION):

- Patients were pregnant women in their first trimester of pregnancy who participated in the original "Life-ON" project and developed PND (EPDS score >12) anytime from the second trimester until 12 months after delivery.
  - Exclusion criteria: Depressive episode at the baseline visit, diagnosis of psychiatric disorder or suicide attempt in the past 12 months, taking psychopharmacological treatment or illicit drugs
- Patients were blinded and randomized to:
  - BLT 10,000 lux
  - DRL 19 lux
- Participants received 30 minutes of BLT or DRL every morning within 20 minutes of waking and at a 30 cm distance from light box for six weeks.
- The development of depression was defined by an Edinburgh Postnatal Depression Scale (EPDS) score >12 (0–30, higher scores indicating a greater depression).
- Sustained remission of depression defined by improvement of >50% EPDS score.
- Safety was assessed through side effects measured by Systematic Assessment for Treatment Emergent Event.

INTERVENTION (# IN THE GROUP): 11

COMPARISON (# IN THE GROUP): 11

FOLLOW-UP PERIOD: 12 months after delivery

RESULTS:

Primary Outcome –

- The BLT group reached sustained remission of depression more than the DRL group (73% vs 27%, respectively; *P*=.04).

Secondary Outcome –

- There were no major side effects reported in either group.

LIMITATIONS:

- The studied sample size was small, necessitating caution in interpreting study results and replicating in a larger RCT.
- Intrinsic logistic inconvenience of the treatment, which requires the women, who may be busy with work commitments, medical appointments, and taking care of a newborn, to sit in front of a light box for 30 minutes every morning for six weeks.
- Single-blind design instead of double-blind study allowed researchers to be aware of group assignments to evaluate outcomes.

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