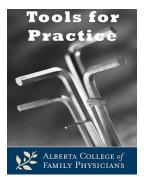
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# St. John's Wort for Depression: Flower Power?

Clinical Question: Is St. John's Wort (SJW) an option for treating mild-moderate depression?

Bottom Line: In mild-moderate depression, SJW may improve depression scores and have response or remission rates similar to antidepressants, with fewer reported adverse effects. The evidence is potentially limited by studies of short duration, funding by SJW manufacturers, and inadequately described methods. SJW may be an option for patients experiencing mild to moderate depression who do not want to use standard therapies.

# Evidence:

- Focusing on seven systematic reviews of randomized controlled trials (RCTs) from the last 10 years, which examined predominantly female patients with moderate depression.<sup>1-7</sup>
- Compared to placebo:1
  - Response rate (defined usually as ≥50% decrease in symptoms), 18 RCTs, 2,922 patients, median follow-up 6 weeks:
    - 56% versus 35% placebo (difference statistically significant), Number Needed to Treat (NNT)=5.
  - Remission rate (usually defined as minimal depression score), nine RCTs, 1,419 patients:
    - No difference.
  - Depression scale change:
    - Three points on 30-point scale: Statistically significant and clinically detectable difference.
  - Adverse effects: No difference.
- Compared to antidepressants (up to 27 RCTs, 3,808 patients):
  - Depression scores, response and remission rates: Similar based on fair to poor quality evidence.<sup>1-3</sup>
  - Adverse effects: Fewer.<sup>1-3</sup>
    - Stopping due to adverse effects: 7% anti-depressants versus 4% SJW, NNT=34.<sup>2</sup>

- Other systematic reviews found similar.<sup>4-7</sup>
- Effects on suicidal thoughts and behaviours unknown.<sup>2</sup>
- Limitations:
  - Low placebo response rates compared to other antidepressant trials.<sup>5</sup>
  - Studies often sponsored by SJW manufacturers.<sup>1</sup>
  - Short trial durations, different definitions of remission/response, blinding of assessors often not described.<sup>1-7</sup>

## Context:

- Many SJW products do not contain what their label claims.<sup>8</sup>
- Specific adverse effects are poorly described and may include headache,<sup>9</sup> photosensitization, skin reactions, and allergies.<sup>10</sup>
- SJW interacts with many common medications, including:
  Decreased efficacy of oral contraceptives, simvastatin, nifedipine, and warfarin.
- Serotonin syndrome risk if combine SJW with selective serotonin reuptake inhibitors.<sup>10</sup>
- Antidepressants do not provide much benefit over placebo in mild depression, but are much more effective than placebo in severe depression.<sup>11</sup>
- There is no reliable evidence for use of SJW in postpartum depression.

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#### **Disclosure:**

Authors do not have any conflicts of interest to declare.

#### **References:**

- 1. Apaydin EA, Maher AR, Shanman R, et al. Syst Rev. 2016; 5:148.
- 2. Gartlehner G, Gaynes BN, Amick HR. Ann Intern Med. 2016; 164:331-41.
- 3. Ng QX, Venkatanarayanan N, Ho CY. J Affect Disord. 2017; 210:211-21.
- 4. Cipriani A, Barbui C, Butler R, et al. BMJ Clin Evid. 2011 May 25; 2011. pii:1003.
- 5. Linde K, Berner MM, Kriston L. Cochrane Database Syst Rev. 2008; 4:CD000448.
- 6. Maher AR, Hempel S, Apaydin E, *et al*. Rand Health Q. 2016; 5(4):12.
- 7. Gartlehner G, Wagner G, Matyas N, *et al.* BMJ Open. 2017; 7:e014912.
- 8. Newmaster SG, Grguric M, Shanmughanandhan D, *et al*. BMC Med. 2013; 11:222.
- 9. Shelton RC, Keller MB, Gelenberg A, *et al*. JAMA. 2001; 285(15):1978-86.
- 10. Hammerness P, Basch E, Ulbricht C, *et al.* Psychosomatics. 2003; 44:271-82.
- 11. Kirsch I, Deacon BJ, Huedo-Medina TB, *et al.* PLoS Med. 2008; 5(2):e45.

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