Template

Entire dispensary

Review plan (10)

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Antibiotic Support

Template by Fullscript

Updated Oct 23rd, 2024

Preview Evidence

Evidence rating

The following protocols were developed using only a,b,c,d-quality evidence

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Overview

Antibiotics have been shown to disrupt the gastrointestinal flora, contributing to undesirable digestive concerns. It's estimated that approximately 30% of individuals taking antibiotics experience diarrhea, with symptoms ranging from mild to severe, especially in cases involving *Clostridium difficile*. (Newberry 2012) Antibiotic-associated diarrhea (AAD) is a primary factor in individuals discontinuing their antibiotic treatment. (D'Souza 2002)

Various studies demonstrate that probiotics may help maintain or restore gut microbe diversity during or after antibiotic treatment. Current evidence primarily involves *Lactobacillus* strains as well as *Saccharomyces boulardii*. (Newberry 2012) (Szajewska 2005)

Lactobacillus strains

Lactobacillus strains (e.g., *Lactobacillus rhamnosus GG*, *Lactobacillus reuteri*, *Lactobacillus casei*)

50–100 billion colony-forming units (CFUs) of a multi-strain probiotic containing *Lactobacilli* for 1–3 weeks with the onset of antibiotic use or for five days after the last antibiotic dose (<u>Gao 2010</u>) (<u>Rodgers 2013</u>)

- A meta-analysis indicates that probiotics, particularly *Lactobacilli*, show promise in preventing AAD. (<u>D'Souza 2002</u>)
- A meta-analysis of 63 randomized controlled trials (RCTs) involving 11,811 participants found that probiotics, primarily *Lactobacillus*-based probiotics, significantly reduced the risk of AAD by 42%. (Newberry 2012)
- A subgroup analysis of six RCTs found that starting probiotics within two days of antibiotic treatment lowered AAD prevalence by 29% in elderly individuals. (<u>Zhang</u> (2022)
- A probiotic blend containing Lactobacillus acidophilus CL1285 and Lactobacillus casei LBC80R Bio-K+ CL1285 significantly reduced the incidence of AAD by 44.1% compared to placebo, with shorter symptom duration for AAD and lower incidence of Clostridium difficile-associated diarrhea (CDAD). The study demonstrated that a higher dose of 100 billion CFUs was more effective and resulted in fewer gastrointestinal symptoms than 50 billion CFUs. (Gao 2010)

Saccharomyces boulardii

Saccharomyces boulardii

500–1,000 mg (10–20 billion CFUs) per day, starting with the initiation of antibiotic treatment and continuing for three days to two weeks.

- A systematic review of five RCTs found that *S. boulardii* reduced the risk of AAD from 17.2% to 6.7%. *S. boulardii* was shown to be moderately effective in preventing AAD in patients taking antibiotics, primarily for respiratory tract infections. (<u>Szajewska</u> 2005)
- A systematic review of 21 RCTs noted that *S. boulardii* reduced the risk of AAD from 18.7% to 8.5%. Furthermore, *S. boulardii* was shown to effectively reduce the risk of AAD in both children and adults, with significant reductions also seen in CDAD in children. (Szajewska 2015)

References

1. D'Souza, A. L. (2002). Probiotics in prevention of antibiotic associated diarrhoea: meta-analysis. *BMJ. British Medical Journal*, *324*(7350), 1361. https://doi.org/10.1136/bmj.324.7350.1361

- 2. Gao, X. W., Mubasher, M., Fang, C. Y., Reifer, C., & Miller, L. E. (2010). Dose–Response Efficacy of a Proprietary Probiotic Formula of Lactobacillus acidophilus CL1285 and Lactobacillus casei LBC80R for Antibiotic-Associated Diarrhea and Clostridium difficile -Associated Diarrhea Prophylaxis in Adult Patients. *the American Journal of Gastroenterology*, 105(7), 1636–1641. https://doi.org/10.1038/ajg.2010.11
- 3. Newberry, S. J. (2012). Probiotics for the prevention and treatment of Antibiotic-Associated diarrhea. *JAMA*, *307*(18), 1959. https://doi.org/10.1001/jama.2012.3507
- 4. Rodgers, B., Kirley, K., & Mounsey, A. (2013). PURLs: prescribing an antibiotic? Pair it with probiotics. *The Journal of family practice*, *62*(3), 148–150.
- 5. Szajewska, H., & Kołodziej, M. (2015). Systematic review with metaanalysis:Saccharomyces boulardiiin the prevention of antibiotic-associated diarrhoea. *Alimentary Pharmacology & Therapeutics*, *42*(7), 793–801. https://doi.org/10.1111/apt.13344
- 6. Szajewska, H., & Mrukowicz, J. (2005). Meta-analysis: non-pathogenic yeast Saccharomyces boulardii in the prevention of antibiotic-associated diarrhoea. Alimentary Pharmacology & Therapeutics, 22(5), 365–372. https://doi.org/10.1111/j.1365-2036.2005.02624.x
- 7. Zhang, L., Zeng, X., Guo, D., Zou, Y., Gan, H., & Huang, X. (2022). Early use of probiotics might prevent antibiotic-associated diarrhea in elderly (>65 years): a systematic review and meta-analysis. *BMC Geriatrics*, *22*(1). https://doi.org/10.1186/s12877-022-03257-3

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