Reversal of Spironolactone-Induced Gynecomastia: A Review and Case Report of Spironolactone-Induced Gynecomastia

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Introduction: Gynecomastia, an enlargement of male breast tissue is a common, asymptomatic condition that increases with aging and obesity; however, the condition can be detrimental to one's mental health. Medications account for approximately 20-25% of the new cases of gynecomastia in adults, and the anti-hypertensive agent spironolactone. Eplerenone, a more selective aldosterone inhibitor compared to spironolactone, is cited as an alternative that can reverse spironolactone-induced gynecomastia in patients with hyperaldosteronism and cirrhosis. Therefore, we have reviewed the recent literature to assess the reports relating spironolactone-induced gynecomastia reversal after discontinuation of spironolactone and replacement with eplerenone, and we present a case of spironolactone-induced gynecomastia.

Methods: The PubMed database was queried to identify all original articles on this topic from January 1, 2005 through August 1, 2022 based on the search term "gynecomastia, spironolactone, eplerenone." A manual search of the works cited included original articles.

Results: The search yielded 42 articles. In total, 4 articles were included in the final review with a total of 204 patients. Systematic or meta-analytic reviews were excluded. All included studies demonstrated resolution of gynecomastia with discontinuation of spironolactone or replacement with eplerenone.

Conclusion: Based on the results of this review, it is clear that there is a significant gap in the literature pertaining to the importance of identifying and treating gynecomastia, and reversing spironolactone-induced gynecomastia in patients with heart failure and cirrhosis. Future studies should aim to investigate the therapeutic benefits of discontinuing spironolactone in medication-induced gynecomastia or replacing treatment with eplerenone.