

O16

Lithium as an Adjuvant to Radioactive Iodine Therapy in Patients with Differentiated Thyroid Carcinoma: A Meta-analysis

Dr Jose Paolo Panuda¹, Dr Anna Angelica Macalalad-Josue¹

¹University of Philippines-Philippine General Hospital, Manila, Philippines

Free Paper 4, November 10, 2017, 2:15 PM - 3:15 PM

Objectives:

To assess the effects of lithium as an adjuvant to RAI therapy for residual or metastatic differentiated thyroid carcinoma.

Methods:

We performed a systematic literature search in MEDLINE, EMBASE, The Cochrane Library and trial registries. We included randomized controlled trials (RCT) comparing RAI therapy with adjuvant lithium versus RAI therapy alone or in combination with either placebo or rhTSH in adults with differentiated thyroid carcinoma (DTC). The last date of search was June 9, 2017. Two review authors independently extracted data, assessed the risk of bias and evaluated overall study quality using GRADE. A random-effects model was used for pooling data.

Main Results:

Out of the 587 potentially relevant articles on initial systematic search, we included two RCTs involving 86 adult post-thyroidectomy patients with low-risk DTC for initial RAI therapy. One study had unclear risk of bias in most of the domains. The second study had a good methodologic quality but included a small sample size. We found no statistically significant difference between the lithium and control groups in terms of successful ablation as indicated by a negative WBS after 1 year (OR 2.35; 95% CI 0.39 to 13.98). No deaths or serious adverse events were reported. No study examined all-cause and disease-specific mortality.

Author's Conclusion:

The pooled results suggest that adding lithium to RAI does not increase the rates of successful remnant ablation low-risk DTC patients. Larger RCTs with better methodologic quality are needed to establish the utility of lithium as an adjuvant to RAI among patients with DTC.