

**CASE REPORT**

# Therapeutic Lymphangiography Following Infective Chyloma: An Unconventional Approach

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## INTRODUCTION

Chyle leak post neck dissection is a rare but serious complication that poses a challenge to the surgeon. Its incidence ranges between 1-5% in neck dissections and more commonly occurs with dissection of the left side in the proximity of the thoracic duct. This is a first reported case of infected chyloma, following a Left Modified Radical Neck Dissection (MRND) with Central Lymph Node Dissection (CLND) which failed to be controlled with surgical exploration but was successfully treated with lymph angioembolization using ethiodised oil (Lipiodol).

## CASE REPORT

A 73-year-old gentleman diagnosed with Papillary Thyroid Carcinoma metastasize to nodal and lung underwent total thyroidectomy with intraoperative nerve monitoring. During surveillance noted FDG avid and proceeded with left MRND and CLND. Intraoperatively 90% of level II, III, IV lymph node removed and there was an iatrogenic injury to left IJV. Day 2 postoperatively, patient presented with chyle leak up to 300cc/day and was treated prophylactically with introduction of a high-protein, low-fat diet with medium-chain triglycerides. Following diet modification failure, TPN was initiated to slow lymphatic flow. A subsequent attempt lipiodol embolization following a partial control by surgical exploration was successful in completely sealing the leak.

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## **DISCUSSION**

When supportive management proved ineffective, lymphangiogram with Lipiodol is an option for diagnostic and therapeutic purpose with an efficacy of 50%. Effective and definitive treatment of this complication can be achieved through utilizing lymphangiography and lymph angioembolization to localize and treat the chyle leak. Use of lymphangiography has been reported for treatment of intrathoracic chyle leaks and it was proven to be better compared to surgery which is invasive with the potential failure to locate a leak.

## **CONCLUSION**

Combination of surgical exploration and lymph angioembolization is a viable treatment option for large amount chyle leak post total thyroidectomy and MRND.