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Published in:
Annals of Surgical Oncology

DOI:
[10.1245/s10434-021-10268-8](https://doi.org/10.1245/s10434-021-10268-8)

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Document Version
Publisher's PDF, also known as Version of record

Publication date:
2021

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Jonker, P. K. C., & Sywak, M. (2021). ASO Author Reflections: Multimodality Treatment in Anaplastic Thyroid Cancer: Improving Survival Outcomes and Balancing Treatment Related Complications. *Annals of Surgical Oncology*, 28(12), 7531-7532. <https://doi.org/10.1245/s10434-021-10268-8>

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ASO Author Reflections: Multimodality Treatment in Anaplastic Thyroid Cancer: Improving Survival Outcomes and Balancing Treatment Related Complications

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PAST

Patients diagnosed with anaplastic thyroid cancer (ATC) have a median survival of 6 months and the optimal management approach is unclear.¹ Few studies compare multimodality treatment (MMT) with limited treatment (LT) in patients with ATC and there is great variability in treatment approaches. There is no standard definition of MMT or LT in the setting of ATC. In addition, a structured comparison of combined surgical complications, systemic treatment toxicity, and radiotherapy morbidity between MMT and LT is lacking.

PRESENT

The current study assessed the effect of MMT versus LT on oncologic outcomes and overall morbidity in patients with ATC.² MMT regimens consisted of a combination of two or more treatment modalities incorporating surgery, radiotherapy (≥ 50 Gy), and systemic treatment. LT was defined as single therapy (surgery, systemic treatment, or radiotherapy) or bimodal treatment consisting of a combination of surgery, systemic treatment, or radiotherapy. MMT improved locoregional control (18.5 vs. 1.9 months), progression-free survival (4.9 vs. 1.9 months), and overall

survival (6.9 vs. 2.0 months) compared with LT. The increased median overall complication number in patients treated with MMT (five complications) compared with LT (one complication), and equal prevalence of grade 4 and grade 5 complications in both cohorts, illustrates the significant risks associated with ATC treatment. Both MMT and a better performance score at diagnosis were associated with improved overall survival in ATC. The results from this study provide further support for the benefits of MMT but show that this should be weighed against the higher number of complications that may affect quality of life during the modest but significant survival improvement.

FUTURE

New treatment regimens to improve oncological outcomes for patients with ATC are urgently needed. The rarity of ATC underlines the importance of a global collaboration to address this need.³ Tissue banking followed by gene expression analysis and target validation may provide insight into ATC-specific therapeutic targets and pave the way for a more efficient translation of effective treatments.⁴ In addition, future studies should focus on structured reporting of performance status, treatment-associated morbidity, and quality-of-life metrics of patients with ATC.

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