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ASO AUTHOR REFLECTIONS

ASO Author Reflections: Salvage Surgery for Anal Cancer

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PAST

Anal squamous cell carcinoma (SSC) is a relatively rare malignancy with an increasing incidence over the last years. Chemoradiotherapy (CRT) has replaced surgery as treatment for primary anal SCC and is currently standard of care for primary anal SCC. Treatment with CRT leads to preservation of the anal sphincter and a 5-year survival rate up to 80%. Failure of CRT occurs in 20-30% of the patients, resulting in persistent or recurrent anal SCC. The only available treatment option to achieve durable local control and survival for persistent or recurrent anal SCC is salvage abdominoperineal resection (APR). Outcomes of salvage APR for anal SCC were previously described in small and heterogenic groups and with variance in treatment protocols. This study evaluated oncologic outcomes and prognostic factors after salvage APR for anal SCC over almost 3 decades with little change in treatment protocol.

PRESENT

This study confirmed that salvage APR for either persistent or recurrent anal SCC, after failed initial treatment with CRT, can achieve long-term survival and durable local control.² An overall 5-year survival rate of 41.6% was achieved, and the 5-year local recurrence rate was 44.7%. There was no difference in survival between persistent or

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recurrent anal SCC. Important prognostic factors associated with decreased survival are an increased pathological tumour size, positive lymph nodes, and involved resection margins. These prognostic factors have been described previously. Achievement of clear resection margins is the most important prognostic factor, which affects survival and local control. This study confirms the benefit of salvage APR for persistent or recurrent anal SCC after failure of primary treatment with CRT. Surgical treatment of re-recurrence after salvage APR, however, does not appear to be useful.

FUTURE

The use of salvage APR is well established, but achievement of a higher rate of clear resection margins remains a challenge. Intraoperative radiation therapy could be of value to improve overall survival and local control, but further research is warranted.³

The biggest challenge remains systemic treatment of unresectable or metastasized anal SCC. Current systemic chemotherapy schemes often are based on 5-FU and Cisplatin and show poor response and survival rates.⁴ However, a recent promising phase-II trial with combined treatment of docetaxel, cisplatin, and fluorouracil for patients with metastatic or unresectable locally recurrent anal SCC showed a high proportion of complete responses and long-term remissions.⁵ Other randomized, controlled including taxanes, targeted therapy, immunotherapy, are currently performed and could provide promising treatment strategies in the near future. Further investigation should establish the use of these therapies.

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REFERENCES

- Glynne-Jones R, Nilsson PJ, Aschele C, et al. Anal cancer: ESMO-ESSO-ESTRO clinical practice guidelines for diagnosis, treatment and follow-up. *Eur J Surg Oncol*. 2014;40(10):1165–76.
- 2. Hagemans JAW, Blinde SE, Nuyttens JJ, et al. Salvage abdominoperineal resection for squamous cell anal cancer: a 30-year single-institution experience. *Ann Surg Oncol.* 2018;25(7):1970–9.
- Hallemeier CL, You YN, Larson DW, et al. Multimodality therapy including salvage surgical resection and intraoperative radiotherapy for patients with squamous-cell carcinoma of the anus with residual or recurrent disease after primary chemoradiotherapy. *Dis Colon Rectum.* 2014;57(4):442–8.
- 4. Eng C, Chang GJ, You YN, et al. The role of systemic chemotherapy and multidisciplinary management in improving the overall survival of patients with metastatic squamous cell carcinoma of the anal canal. *Oncotarget*. 2014;5(22):11133–42.
- Kim S, Francois E, Andre T, et al. Docetaxel, cisplatin, and fluorouracil chemotherapy for metastatic or unresectable locally recurrent anal squamous cell carcinoma (Epitopes-HPV02): a multicentre, single-arm, phase 2 study. *Lancet Oncol.* 2018;19(8):1094–106.