A systematic review of outcomes after salvage abdominoperineal resection for persistent or recurrent anal squamous cell cancer

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BACKGROUND: Squamous cell carcinoma of the anus (SCCA) is typically treated with chemoradiation. Up to 30% of patients with SCCA will require a salvage abdominoperineal resection (APR) for persistent or recurrent disease.

Although salvage surgery is common, there is little published evidence summarizing long term outcomes

OBJECTIVE: To assess cancer related outcomes in patients with persistent (PD) and recurrent SCCA (RD).

ASSESSED OUTCOMES: Overall survival (OS), disease free survival (DFS), and locoregional recurrence or metastatic disease.

STUDY DESIGN: Systematic review.

RESULTS:

- 20 observational, case series studies (year of publication: 1994-2016).
- Study Size = 9 – 111 patients (Median 31.5).
- 10 studies included both HIV and non-HIV patients, but did not analyse the outcomes separately.
- Inconsistent chemotherapy regimens (5FU + MMC, 5FU + Cisplatin, 5FU + Bleomycin/Carboplatin).

- Surveillance protocols were inconsistent (Anoscopy, CT, MRI).
- Median follow-up was 33 months following salvage surgery.
- Persistent disease typically considered if < 6 months from completion of chemoradiation (14 of 18 with a definition).

	Persistent Disease	Recurrent Disease	All
Time to Surgery	2.8 months (IQR 2.6 – 2.8)	25.6 months (IQR 23.5 – 27.6)	--
Wound Complications	NR Separately	NR Separately	45.0% (IQR 18.1 – 59.0%)
Perioperative Mortality	NR Separately	NR Separately	0% (IQR 0 – 2%)
5 Year Overall Survival	46.0% (IQR 32.5 – 54.2%)	36.0% (IQR 14.0 – 60.9%)	41.5% (IQR 32.3 – 53.1%)
5 Year Disease Free Survival	NR Separately	NR Separately	44.0% (IQR 29.8 – 48.6%)
Local Regional Recurrence	NR Separately	NR Separately	39.8% (IQR 34.8 – 64.8%)
Metastatic Disease	NR Separately	NR Separately	15.0% (IQR 6.7 – 30.0%)

- Median time to recurrence after salvage APR was 9.2 months (IQR 8.6 – 11.3).
- The most common site of metastatic disease was the liver. Other sites included bone, lung, and brain.
- Chemotherapy was used to treat locoregional recurrence and metastatic disease after salvage APR. Surgery was used to treat nodal recurrence.
- Median survival after recurrence following salvage APR was 21 months (IQR 13 - 35).

CONCLUSIONS: Our review summarizes the best evidence for outcomes following salvage APR for patients with persistent or recurrent SCCA. The evidence is limited by the quality of included studies, as many were single center case series.

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