

Surgical Treatment Options for Rectal Carcinoid Cancer: Trans-Anal Excision versus Low Anterior Resection with Total Mesorectal Excision

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Background: The biological behavior of rectal carcinoids has yet to be fully appreciated due to the rarity of the disease and thus, the optimal surgical treatment remains controversial. Oftentimes, primary tumors less than 2 cm are assumed to be indolent and treated by trans-anal excision. We hypothesized that rectal carcinoids are more malignant than previously described and small tumors warrant more aggressive surgery than what has been traditionally recommended.

Methods: The charts of 62 consecutive rectal carcinoid patients seen at our institution between 10/2006-8/2011 were retrospectively reviewed. The primary tumor size, extent of disease, surgical history, and basic survival data was collected for analysis.

Results: Thirty-two patients had localized disease and three patients had lymph node metastasis without distant metastasis. All 35 patients are alive. Twenty-seven patients had distant disease. Four patients had only a local excision of their rectal carcinoid; two of these patients have died. Nine patients had an initial local excision, followed by a radical excision; one patient has died. Twelve patients had an initial radical resection; five of these patients have died. Two patients did not undergo any surgical procedures; both have died. The primary tumor size and chances of lymph node metastases for all 32 patients are as follows: <1 cm: 2/26 (8%); 1.1-2 cm: 9/13 (69%); 2.1-3 cm: 4/5 (80%) and >3 cm: 7/12 (58%).

Conclusions: Rectal carcinoids are more malignant than previously portrayed. Primary tumors greater than 1 cm have a much higher rate of lymph node metastasis than previously reported. We believe that tumors larger than 1 cm should have a Low Anterior Resection (LAR) with Total Mesorectal Excision (TME) as their initial definitive treatment. For tumors less than 1 cm, surgical treatment should be individualized.