

Annual Case Review: Rectal Carcinoma

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Cancer originating in the colon and rectum will affect about 150,000 people in the United States in 2005 and cause 56,000 deaths, with an estimated 2800 in Maryland alone. The subset of the tumors limited to the distal 15cm of bowel comprise the rectal cancers. Although similar histologically to tumors in the rest of the colon, the clinical course of rectal cancer is different because of its propensity to recur locally in the pelvis, often causing neuropathic pain. Therefore, radiation has become an additional consideration for management of these malignancies in the adjuvant setting.

Data from the tumor registry in 2004 at GBMC identified 18 analytic cases of rectal cancer. 44% of our patients had Stage III disease (positive nodes) at presentation, nearly twice the national average, but GBMC had fewer patients with metastasis at the time of diagnosis See Table 1.

Advancing age is the primary risk factor for rectal cancer, and 50% of our patients in 2004 were age 70 or greater. Only 2 patients were under age 50, See Table 2. Current screening guidelines recommend colonoscopy starting at age 50 and that also seems reasonable based on our patient population. Males accounted for 56% of our patients, similar to the national average.

The surgical intervention included segmental resection of the lesion in two-thirds of rectal cancer patients at GBMC, nearly twice the national average, See Table 3. Only 15% had no surgery or local excision, possibly reflecting concern for local recurrence among the surgical staff and careful patient selection for the more limited surgical procedures. Surgery alone was commonly employed in patients with Stage 0 or Stage 1 lesions (See Table 4a, See Table 4b), but multimodality approaches using surgery, radiation and chemotherapy was employed in 43% of Stage 2, and nearly 75% of Stage 3 patients (See Table 4c, See Table 4d). Those patients with Stage 4 (metastatic) disease had various interventions often including systemic chemotherapy, but 16% had no treatment and 20% had surgery alone (See Table 4e).

Over 200 patients were entered into the GBMC Tumor Registry with rectal cancer between 1993 and 2000. The 5-year survival for these patients compares favorably with the National Cancer Database statistics, stage for stage. (See Table 5) Patients with Stage 3 disease did slightly worse, but the 5-year survival for patients in Stage 4 was more than double the national average. The availability of investigational agents during that time period through the clinical trials program, may have been a factor in improved survival, since many of the agents being tested at GBMC during those years subsequently proved effective in colon cancer and were approved by the FDA.

Table 1

**Rectal Cancer
Comparison of AJCC Staging**

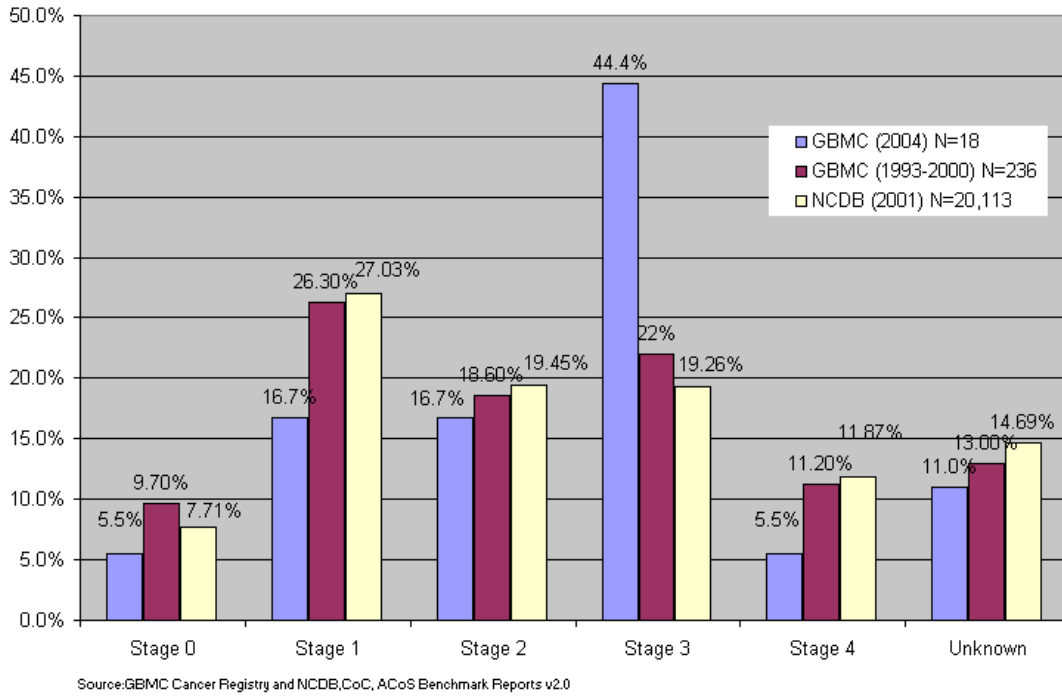


Table 2

**Rectal Cancer
Age at Diagnosis 2004**

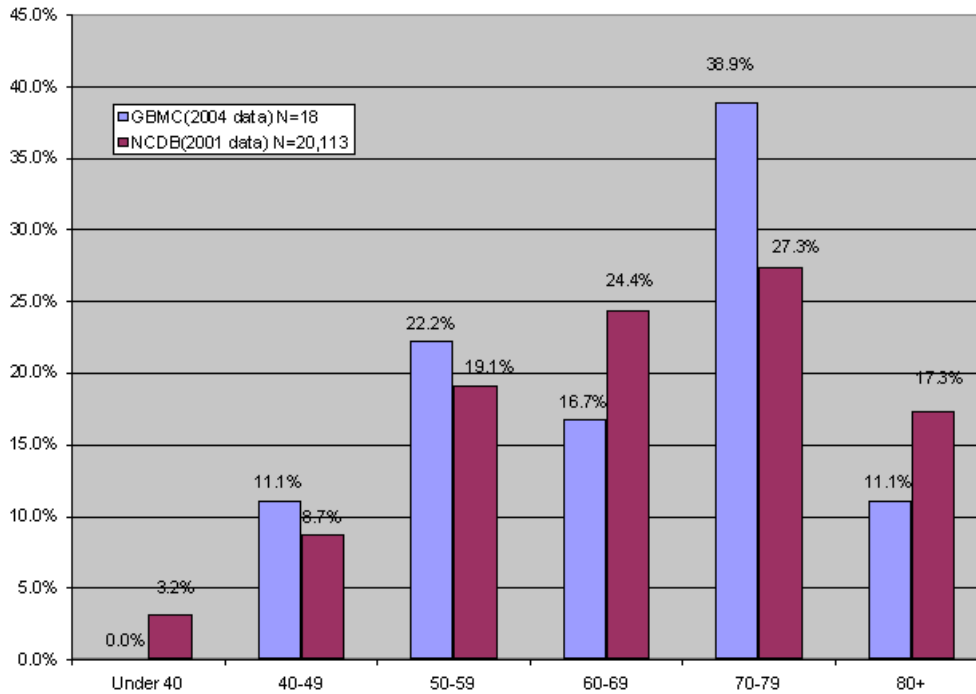
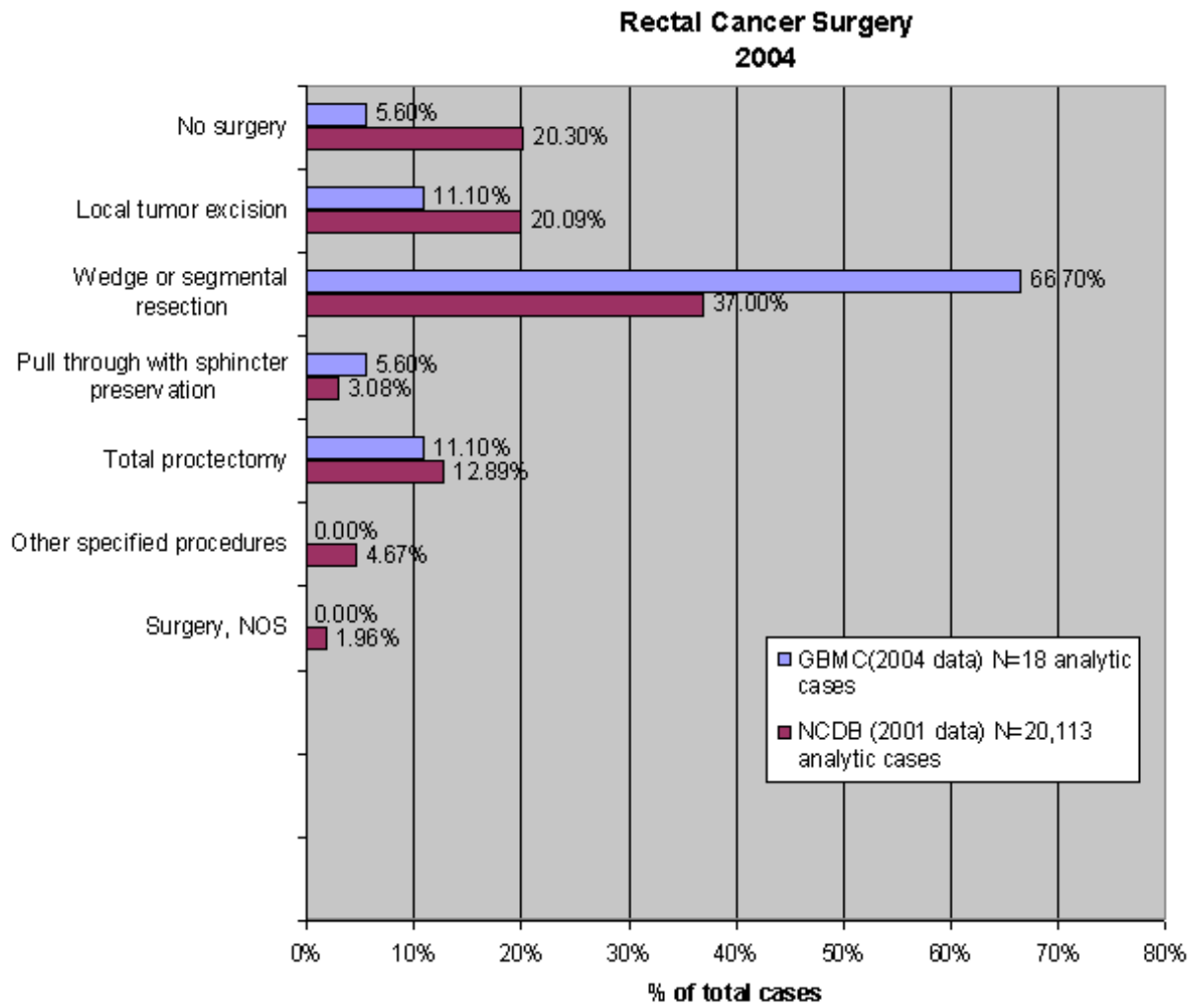


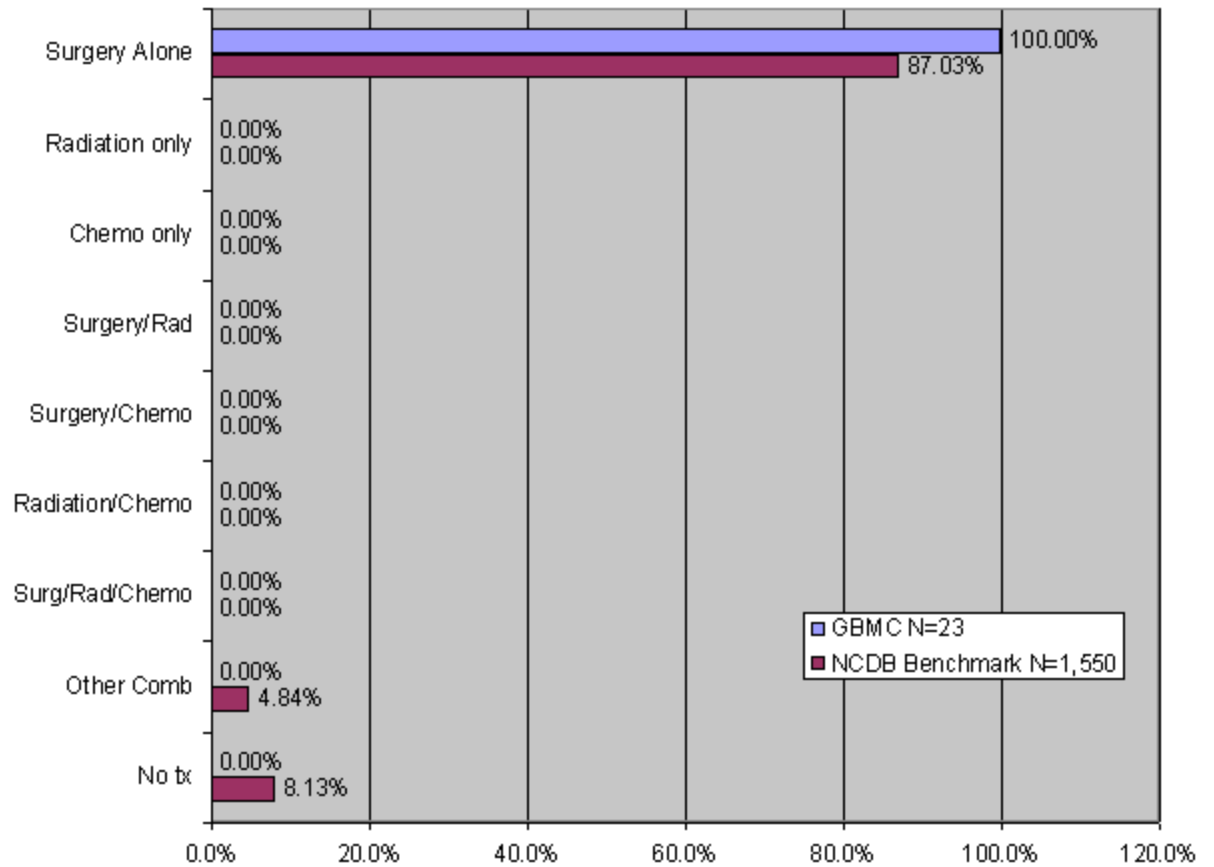
Table 3



Source: GBMC Cancer Registry and NCDB, CoC, ACoS Benchmark Reports v2.0

Table 4a

**Treatment Combinations
Rectal Cancer at GBMC 1993-2000
Stage 0**



Source: GBMC Cancer Registry and NCCDB, CoC, ACoS Benchmark Reports v2.0

Table 4b

**Treatment Combinations
Rectal Cancer at GBMC 1993-2000
Stage I**

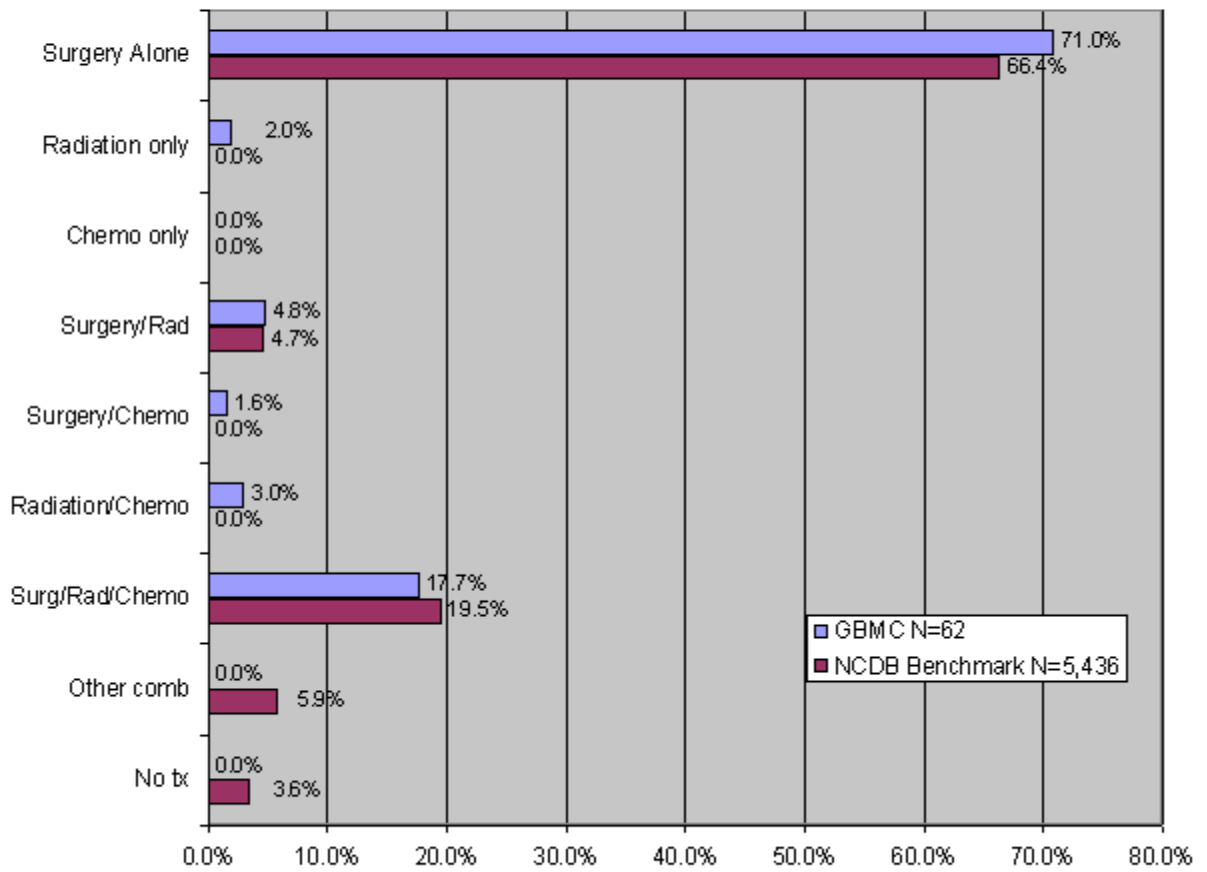


Table 4c

**Treatment Combination
Rectal Cancer at GBMC 1993-2000
Stage 2**

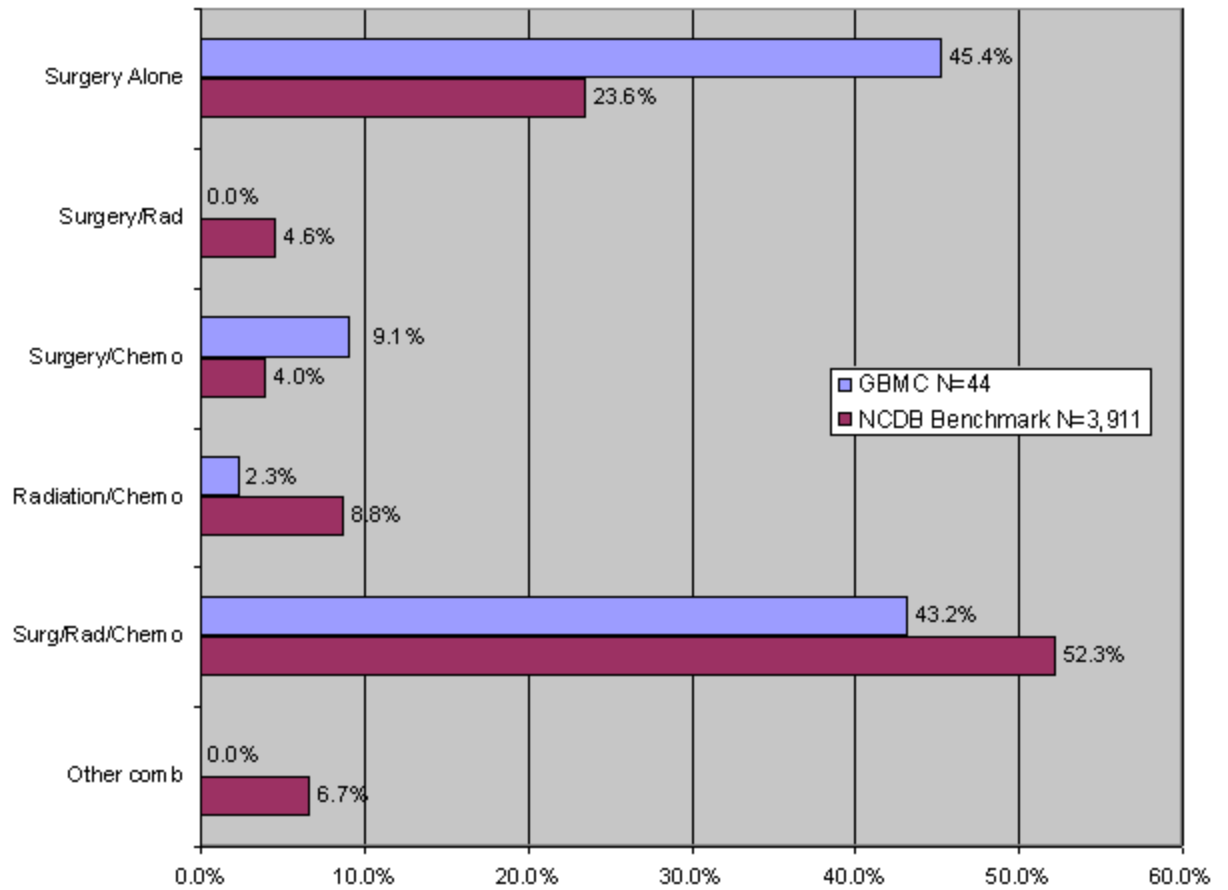


Table 4d

Treatment Combinations
Rectal Cancer at GBMC 1993-2000
Stage 3

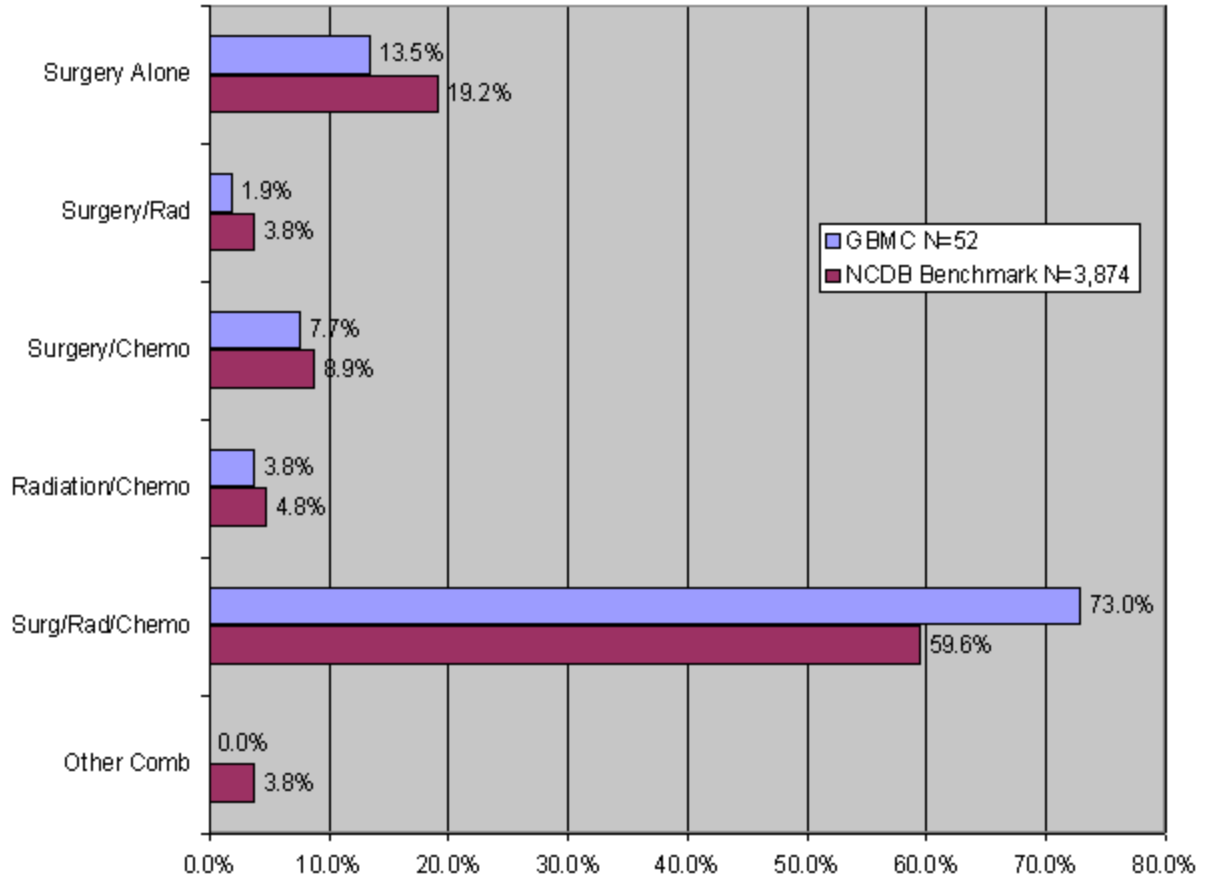


Table 4e

**Treatment Combinations
Rectal Cancer at GBMC 1993-2000
Stage 4**

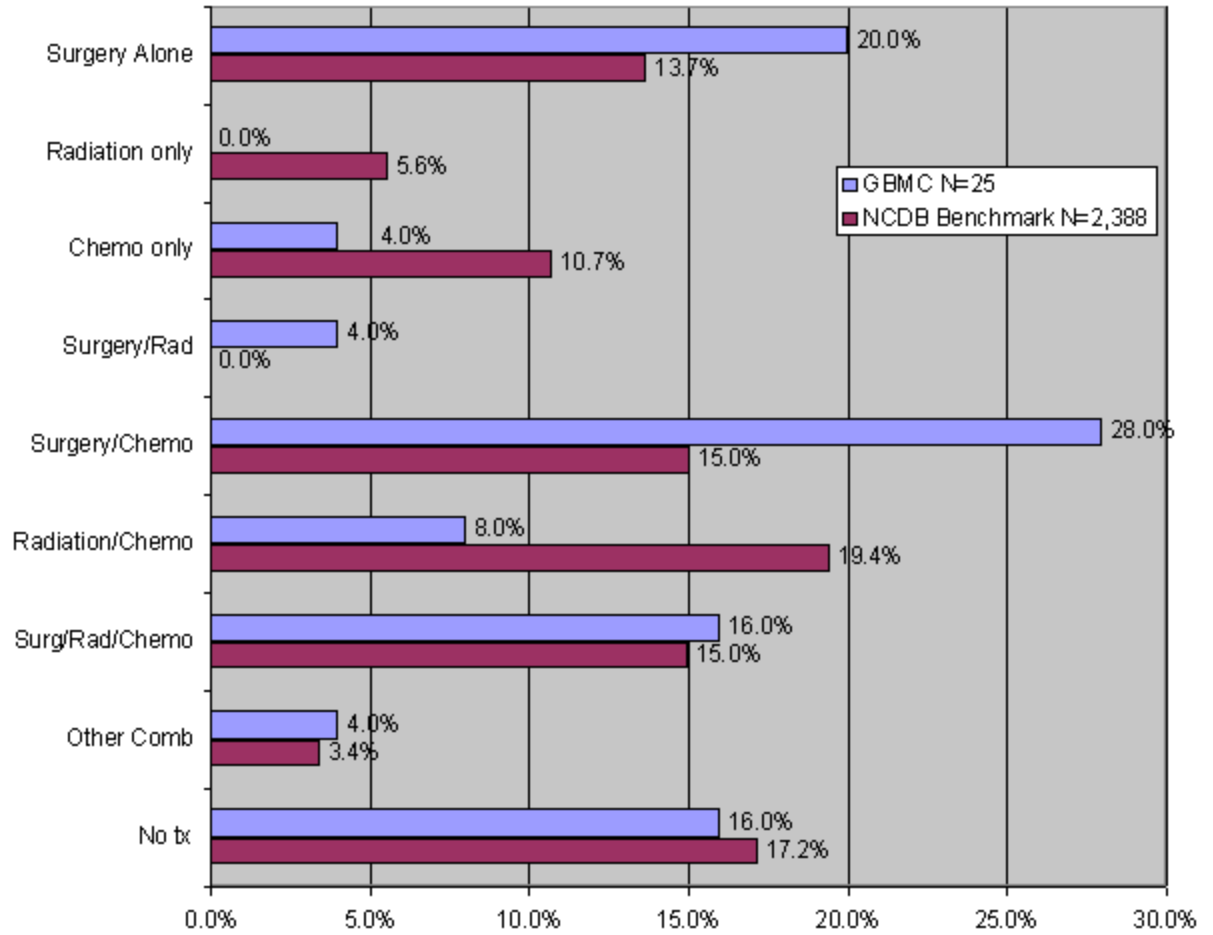
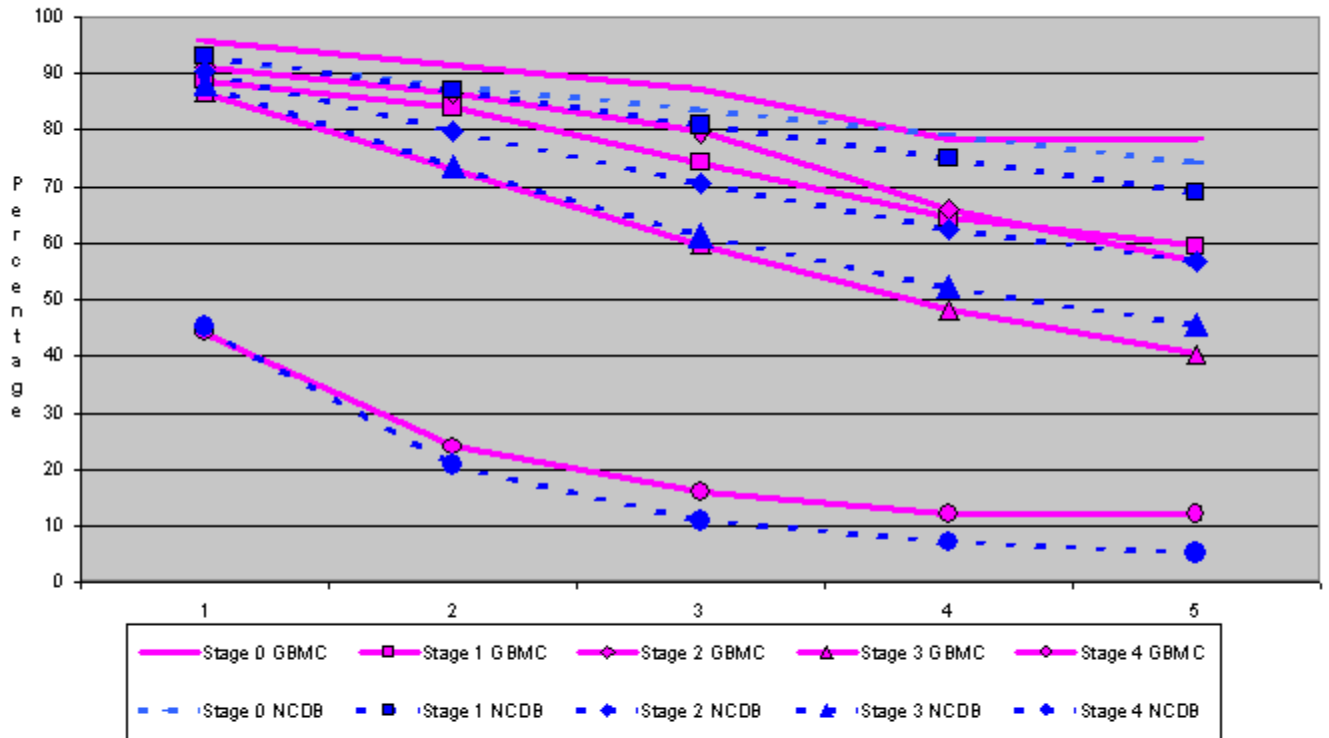


Table 5

**5 Year Survival
Rectal Cancer at GBMC
1993 - 2000**



	5 Year Observed Survival Rate			
	GBMC		NCDB*	
Stage 0	N=23	78.30%	N=3,235	74.10%
Stage 1	N=62	59%	N=10,649	68.9%
Stage 2	N=44	56.7%	N=7,807	56.7%
Stage 3	N=52	40.3%	N=8,168	45.4%
Stage 4	N=25	12.0%	N=5,060	5.1%

Source: NCDB, Commission on Cancer, ACoS/ACS Survival Report v2.0