evidence of metastasis. The patient underwent SCRT followed by abdominoperineal excision of the rectum and anus 19 days later.

Macroscopically, there was normal mucosa, and seven lymph nodes were identified. Histology showed features in-keeping with the previous radiotherapy, characterized by focal transmural fibrosis and a patchy transmural chronic inflammatory infiltrate. No residual neoplasia was identified and all lymph nodes showed simple reactive changes [Figure 4].

Surgery remains the mainstay treatment for rectal cancer,[1] although in Europe radiotherapy has been used in the neoadjuvant and adjuvant setting for a long time, to reduce local recurrence.[4] Short course radiotherapy (SCRT) including the Dutch Colorectal Cancer Group and the Swedish Rectal Cancer Trial demonstrated a reduced risk of local recurrence[2,3] and concluded that preoperative SCRT might improve survival among patients with resectable rectal cancer.[3] In both these trials surgery was performed within a week of completing radiotherapy. A randomized controlled trial from Poland showed no difference in the local recurrence rate or survival and toxicity rate when comparing SCRT and CRT, which suggests an intensive radiotherapy protocol is achieved with SCRT. SCRT achieves similar results as those by the prolonged standard CRT.[5] In our patient there was a delay of 19 days before radical surgery was performed. This could have contributed to the complete pathological response.

There is reasonable literature on chemoradiation producing 15-30% complete pathological response[4] and this response may be increased with increased time delay between neoadjuvant treatment and surgery,[6] but this evidence is not conclusive. There is some evidence that the subgroup of patients who have favorable tumor regression grade and lymph node status may have a higher rate of complete response.[7] There is an American College of Surgeons Oncology Group (ACOSOG)-supported prospective trial in progress, using local excision following chemoradiation for ultrasound staged T_2 distal rectal cancer.[8] In a significant proportion of a high-risk patient's neoadjuvant treatment, either SCRT or CRT may result in a complete response, whereby, major rectal cancer surgery may be avoided or a local excision with minimal morbidity can be performed. To test this hypothesis, there is a need for a multi-arm randomized controlled trial of early rectal cancer, that is, < = T2 with no nodal disease on radiological staging, receiving SCRT or CRT with varying periods between radiotherapy and radical surgery, to define the optimal time period between radiotherapy regimes and surgery and to find the subgroup of patients where a major resection can be avoided.

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Breast cancer incidence among females in the Golestan province, Iran

Sir,

Cancer is the third most common cause of death in Iran and, annually, 30,000 Iranians die due to cancer.[1] We evaluated province-specific estimates of incidence of breast cancer in females in the Golestan province of Iran in 2004. The Golestan province is located in the north of Iran, in the south east of the Caspian Sea. Data were identified and collected through 18 Pathology Laboratory centers. Using a structured questionnaire, trained personnel conducted in-person interviews to collect information on breast cancer.

Table 1: Breast cancer incidence among females in the Golestan province in 2004

Ages (years)	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
Persons	69,465	84,583	11,2921	12,3107	89,519	67,719	59,689	52,192	35,723	29,885	28,116	21,321	13,615	8240	8614	3909	2923	1818
Incidence rates (per 100,000)	-*	-	-	-	-	5.91	10.05	11.50	30.79	43.50	46.24	14.07	7.34	12.14	46.44	51.16	68.42	55.01

-*no cancer incidence.

Newly diagnosed cases that are detected by histological or cytological examinations were sent to the Cancer Registry Office of the province and to the registry unit in the Health Deputy. Age-specific rates and annual age-adjusted rates (ASRs) per 100,000 person-years were calculated using the direct methods of standardization to the world population. Three hundred and forty-eight patients with cancer from all sites were seen in 2004, with 67 (19.25%) of them having breast cancer. The pathologic diagnosis in these cases was infiltrating duct carcinoma (68.65%), infiltrating ductular carcinoma (4.47%), intra-ductal carcinoma non-infiltrating (4.47%), carcinoma (2.98%), lobular carcinoma (2.98%), comdoc carcinoma (1.49%), medullary carcinoma (1.49%), intra-ductal carcinoma and lobular carcinoma I (1.49%) and phyllades tumor, malignant (1.49%). The overall incidence was 11.81/100,000 persons. Table 1 shows that the highest incidence was in the age range of 80–84 years and the lowest was in the age range of 25–29 years. Comparison of the ASR for breast cancer among females with those of breast cancer worldwide shows that the Golestan province is one of the low-risk areas. The incidence is lower when compared with cancer registry in other countries. The highest incidence rates occur in northern and western Europe, northern America, Australia and New Zealand and in the southern countries of South America, notably Uruguay and Argentina. Clear geographical differences in risk are apparent within Europe, with elevated rates in northern and western Europe, whereas rates in most southern and eastern European countries are low to intermediate.[2] Incidence is low throughout Africa, Asia and most of Central and South America. Rates of more than 100 per 100,000 are noted in several US states, whereas the highest rates are recorded in Montevideo in Uruguay. Rates are elevated (50–100 per 100,000) in registries in geographically diverse areas of the world, including most northern and western European countries, Canada, Israel and Argentina. In several Asian populations, such as Hong Kong, Singapore (Chinese) and the Philippines (Manilla), rates are intermediate (30–50 per 100,000) as they are in Puerto Rico and Goiania (Brazil) in South America and most eastern European populations. The lowest rates are seen in several Chinese populations, including the Quidong registry (about 10 per 100,000), whereas observed rates are also low (10–30 per 100,000) in eastern African populations in Zimbabwe and Uganda, Algiers in North Africa, several Southeast Asian registries (Thailand and Vietnam) and several registries in India. Koreans living in the USA have retained a relatively low breast cancer incidence rate (about 28 per 100,000), not dissimilar to that of Koreans living in Korea (21 per 100,000 in Seoul).[3]

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Primary neuroendocrine carcinoma of the breast, which chemotherapy?

Sir,

Primary neuroendocrine carcinomas of the breast are extremely uncommon, with only very few cases published in English literature. Their best treatment is still unknown and various modes of management have been employed in treating this disease.