UNDERWRITING CANCER

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The underwriting of cancer has improved with a better understanding of the grade, stage, treatment, and follow-up of numerous cancers. The following cases illustrate patients with potentially insurable cancers.

Case #1

A 57-year-old male applicant has a strong family history of colon cancer. Two years ago, on routine sigmoidoscopy, two polyps were biopsied. One showed a carcinoma-in-situ, the second showed very superficial invasion (of lamina propria). No further surgery or treatment was done. Regular follow-ups with colonoscopy have been negative.

Colorectal cancer is the fourth most common cancer in the United States and has the second highest mortality rate. 1993 estimated new cases of colorectal are 152,000. Estimated deaths due to colorectal cancer this year are 57,000.1 Risk factors for colorectal cancer include aging, adenomatous polyps, hereditary factors, inflammatory bowel disease (especially chronic ulcerative colitis), a personal history of previous colorectal, endometrial, ovarian, or breast cancer, and Western diet. Latest survival data from the American Cancer Society indicate a 58% five-year survival for all stages of colorectal cancer, with 90% for localized, 58% for regional, and 6% for distant involvement.1 However, data from the 1983 Medical Impairment Study indicate excess mortality for colon and rectal (and other) cancers for 15 years after diagnosis, particularly for those who are younger.2 Staging is critical in underwriting decisions.

Several recent studies relate to screening for colorectal cancer.3,4 The fecal occult blood test appears to be a poor marker for colorectal neoplasia (apparently many cancers do not bleed). Conversely, periodic sigmoidoscopy looks more favorable. Surveillance of high risk patients is particularly important.

We need to evaluate treatment and follow-up of cancer patients. Case #1 treatment and follow-up appear appropriate. Overall recurrence rates for colorectal cancer are about 30%, with 90% of the recurrences occurring by the fourth year.5

Case #2

In January, 1992, a 64-year-old male had a PSA of 6.4 ng/ml (reference range: 0-4). Prostate biopsies of each lobe revealed "increased density of gland population with small tubular glands present, suspicious for malignant change." In June, 1992, the PSA was elevated to 7.5 ng/ml. On rebiopsy with a larger bore needle, most of the prostate appeared hyperplastic. There was focal low grade prostate intraepithelial neoplasia (PIN) in one area. No high grade PIN or invasive carcinoma was noted.

Cancer of the prostate continues to increase in incidence. It is the most common non-cutaneous cancer in American males. In 1993, there will be approximately 165,000 new cases.1 Prostate cancer ranks second for cancer deaths among American males. There has been little improvement in the death rate since 1949. This may change with increased screening.6

Staging is critical in underwriting. Clinical understaging is frequent in prostate cancer. Grading and flow cytometry are also important in evaluating the aggressiveness of prostate cancer. Curative prostate treatment includes radical prostatectomy or radiation. Hormone treatment usually suggests cancer beyond the confines of the prostate gland (i.e., stages C and D).

Controversy persists regarding the value of screening for prostate cancer. In November, 1992, the American Cancer Society recommended routine screening of all men 40 and older by annual digital rectal examination and yearly PSA screening beginning at the age of 50. It recommends earlier testing for African-Americans and sons of men with prostate cancer.7 Recent studies emphasize the importance of both the DRE and the PSA, with ultrasound follow-up if either of the primary screening modalities is abnormal.6,8 Last year, Carter and colleagues emphasized the importance of PSA changes in longitudinal evaluation.9 The relationship of PSA to gland volume (PSA density) is also important. With increased use of PSA screening by clinicians, some medical directors have decided to test for PSA to avoid antiselection. The greatest value of PSA is still in follow-up of prior prostate cancer, abnormal prostate findings, or a previously abnormal PSA.

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Case #2 illustrates the increasing problems we have in insurance medicine relative to PSA testing and needle biopsies. Prostate intraepithelial neoplasia (PIN) is a newer descriptive term which describes non-invasive neoplasia. It is important to note that benign biopsies do not completely rule out prostate cancer. Close follow-up is indicated for Case #2.

Case #3

A 53-year-old female had a recent breast biopsy interpreted as "intraductal carcinoma, comedo type, with slight focal evidence of invasion." Subsequent mastectomy showed foci of residual intraductal carcinoma and atypical glandular hyperplasia. Fourteen regional lymph nodes were benign.

The incidence of cancer of the breast continues to increase. There will be an estimated 183,000 new cases in the USA in 1993, with 46,300 deaths related to breast cancer. As with prostate cancer, increased screening has detected an increased number of early breast cancers, especially intraductal (in-situ) cancers. Controversy exists about the value of mammography before age 50.

Factors affecting prognosis and risk of recurrence in breast cancer include tumor size, lymph node involvement, status of estrogen/progesterone receptors, tumor differentiation and histologic type, and flow cytometry patterns.

According to Schnitt, et. al., survival rates for true ductal-in-situ carcinoma vary depending on treatment. With mastectomy, survival approaches 100%. When tumor excision is combined with radiation, approximately 7% recur. If only a lumpectomy is performed, 23% recurrence has been recorded. These figures demonstrate the diffuseness and multicentricity of this process and the difficulty in ruling out minimal infiltration.

Case #3 emphasizes the importance of reading the pathology report. Even tiny invasion makes the cancer invasive and not in-situ.

Summary

An understanding of the stage, grade, treatment, and follow-up of various cancers is critical to wise underwriting of "curable cancers." Long-term follow-up studies indicate some risk of late recurrence.

References