Intriguing new findings have explored the link between pruritus and cancer incidence. Before examining some of this recent data, it’s important to note that this potential connection between pruritus and systemic disease was first explored more than 30 years ago.

In a study published in 1983, investigators evaluated 44 cases of generalized pruritus and found that 30 percent of patients also had a systemic disease. Additionally, in six (or 14 percent) of the patients, the researchers hypothesized a temporal relationship between systemic disease and pruritus.

EXPLORING THE CONNECTION

More recently, researchers sought to evaluate the incidence of malignancy in patients with chronic pruritus during the five years after diagnosis. Examining 8,744 patients with chronic pruritus, the fully adjusted HR for incident malignancy in patients with chronic pruritus was 1.14 (95% confidence interval 0.98-1.33). In addition, the fully adjusted HR for incident hematologic malignancy and incident bile duct malignancy in patients with chronic pruritus was 2.02 (95% confidence interval 1.48-2.75) and 3.73 (95% confidence interval 1.55-8.97), respectively. The incidence of hematologic malignancy and cholangiocarcinoma in patients with chronic pruritus was 0.0016 and 0.0003 per person-year, respectively. The researchers concluded that chronic pruritus without concomitant skin changes is a risk factor for having undiagnosed hematologic and bile duct malignancies, but not other malignancies. However, they also noted that the overall incidence of these malignancies in patients with chronic pruritus is very low.

A few months later, a Danish study examined the association between inpatient, outpatient, and emergency hospital diagnoses of pruritus as a marker of undiagnosed cancer. The investigators used medical databases to identify 12,813 patients with a diagnosis of pruritus during the period 1978-2011 and followed them until a first-time cancer diagnosis, emigration, death, or until the end of 2011. They then computed standardized incidence ratios (SIRs) for cancer as the observed to expected number of cancers based on national cancer incidence rates. The overall SIR of cancer was 1.13 (95% confidence interval (CI) 1.07-1.20): 1.22 (95% CI 1.13-1.33) among men and 1.05 (95% CI 0.97-1.14) among women. The SIR was 1.20 (95% CI 1.08-1.33) among patients with a previous diagnosis of dermatological disease and 1.10 (95% CI 1.02-1.18) among patients without such a diagnosis. Moreover, they observed both haematological and various solid cancers at increased rates. They also found that the highest SIRs were observed during the first three months of follow-up, which rapidly declined rapidly thereafter. Moreover, the one-year absolute risk of a cancer diagnosis was 1.63 percent.

The researchers concluded that pruritus may, in fact, be a marker for occult cancer and recommended further studies to assess the prognostic benefit of screening pruritus patients for cancer.

DISCUSSION AND NEXT STEPS

The relationship between itch and potential malignancy has been known. These two studies validate that link and justify the concern. When evaluating patients, work-ups should include hematologic evaluation and ensuring that health maintenance activities are up to date (i.e. PAP smears, colonoscopy, etc.). Moreover, we should also consider the possibility of abdominal radiographic studies.

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