Behçet's Disease and Colon Cancer

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Although cancers originating from intestinal Behçet's disease (BD) lesions have been rarely reported in spite of clinical similarities with inflammatory bowel diseases (IBD), in their recent report, Yamada et al showed an intestinal BD patient who developed colon cancer in the intestinal lesions (1).

Chronic inflammation is implicated in the oncogenesis of various organs. In particular, some rheumatic diseases are associated with hematological malignancies such as lymphoma. Dysregulated immune functions and repetitive immune stimuli are implicated in lymphoid proliferation and subsequent monoclonal event, resulting in lymphoid malignancy in rheumatic diseases. Immunosuppressive agents are also involved in lymphoproliferative disorders, as shown in methotrexate-related lymphoma in patients with rheumatoid arthritis (RA). Some of them are caused by reactivation of EB virus. Moreover, infectious pathogens such as EB virus and HTLV-1 are involved in not only hematological malignancies but also several autoimmune diseases and rheumatic disease-like manifestations. Similarly, a particular genetic susceptibility can contribute to both rheumatic diseases and oncogenesis.

BD is a chronic, relapsing inflammatory disorder of unknown etiology that is characterized by episodic mucocutaneous and ocular manifestations and sometimes accompanied by the involvement of joints, large vessels, central nervous system, and gastrointestinal tract (2-5). Behçet's disease in association with some malignancies has been sporadically reported in a few case series and case reports (6, 7). According to these reports, myelodysplastic syndrome (MDS) is the most frequent malignancy in BD patients. Notably, trisomy 8 is the most common chromosomal abnormality in MDS-complicated BD patients, suggesting that gene products encoded in chromosome 8 are involved in the pathogenesis of BD. Interestingly, MDS is more frequent in intestinal BD patients than in those with the other phenotypes, though the mechanism remains uncer-

tain.

Inflammatory bowel diseases such as ulcerative colitis and Crohn's disease, share some clinical features with rheumatic diseases (8-13). The association of IBD with colorectal cancer is well established (14). In addition to a long history of chronic inflammation, mucosal regeneration process is also thought to be involved in carcinogenesis of IBD. IBD-related colorectal cancers show distinct pathological and cytogenetic features from those in sporadic colorectal cancers. While Ras protooncogene mutation is more frequent in sporadic cases, abnormalities of p53 and Src activation are more commonly found in IBD. The most common pathology of sporadic colon cancers is adenocarcinoma, whereas poorly differentiated, anaplastic, and mucinous carcinomas are more common in IBD patients. These findings suggest that IBD-related cancers develop through a unique oncogenesis pathway.

Although Yamada et al showed that an intestinal BD patient developed colon cancer in the intestinal lesions (1), it remains uncertain whether intestinal BD predisposes to colorectal cancers. Further detailed pathological studies and cytogenetic analyses may be helpful to resolve the issue.

The authors state that they have no Conflict of Interest (COI).

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