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## **Oral Considerations in Inflammatory Bowel Disease**

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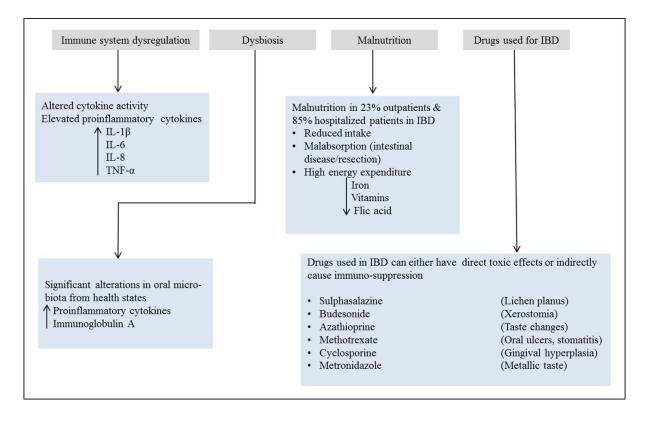
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## **Dear Editor**

Extra-intestinal signs of inflammatory bowel disease (IBD) can reach a site as far as oral cavity. The oral cavity manifestations of IBDs are many and more likely missed by the general practitioners and gastroenterologists. IBD comprises of many chronic states occurring at different locations along the digestive system.<sup>1</sup> The two most important conditions under the umbrella term IBD are ulcerative colitis (UC) and crohn's disease (CD). Both the conditions are associated with chronic inflammation but can lead to acute flare ups. CD occurs anywhere along the digestive tract but mostly affects small intestine, whereas UC exclusively occurs in the large intestine.<sup>2</sup> IBD is considered as a multifaceted disorder with involvement of genetics, immune system, and environmental factors. IBD in addition to the anticipated gastrointestinal signs may have extra-intestinal manifestations in the range of 6% to 47%.<sup>3</sup> IBD manifests with diarrhoea, abdominal pain, weight loss, blood in stools, and production of cytokines, free radicals and proteolytic enzymes that cause inflammation and ulcerations.<sup>4,5</sup>

The most common extra-intestinal sites affected in



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IBD are skin, biliary tract, eyes and joints.<sup>6-9</sup> IBD can manifest in oral cavity also and sometimes the signs appear in mouth even before the disease manifests in the intestines.<sup>10</sup> It is important to recognize and refer such cases for timely diagnosis of IBD and necessary treatments. It is reported that oral manifestations can occur in 5% to 50% of IBD patients.<sup>11</sup> The IBD's extra-intestinal lesions of oral cavity are seen more in CD than in UC and are in the form of both the specific and the non-specific lesions (Table 1).<sup>3</sup>

Specific oral lesions	Non-specific oral lesions
Indurated tag like lesions	Apthous stomatitis
Cobblestoning	Pyostomatitis vegetans
Mucogingivitis	

Irrespective of being specific or non-specific, these lesions in the oral cavity may also occur due to malnutrition,<sup>12</sup> but also due to the drugs used to treat IBD.<sup>13</sup> The pathogenesis of oral lesions in IBD is illustrated in (Figure 1).<sup>14</sup>

The treatment of underlying IBD is very important and lays the foundation for treatment of any extraintestinal lesions, like in oral cavity.<sup>15</sup> The oral lesions secondary to IBD will often resolve after the primary gastrointestinal disease is treated with medications which may include drugs targeting inflammation, heightened immune system, as well as some biological drugs.<sup>16-18</sup>

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