

brosis. This is the first study describing the expression of ER α in fibroblasts, neutrophils and mastocytes located in the area of gastric and duodenal ulcer. Our findings suggest that the process of ulcer healing may be modulated by estrogen. Future research should include determination of ER type (α or β) in ulcer tissue; investigation of the possible correlation of estrogen receptor distribution in ulcer versus gastric cancer (as ER β positive); elucidation of the role of mastocytes in gastric cancer etiology as estrogen receptor positive cells that promote angiogenesis; and research of the possible application of hormone therapy in gastric and duodenal ulcer disease.

SKIN AND RENAL MANIFESTATIONS OF PAUCI-IMMUNE SMALL-VESSEL VASCULITIS

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Pauci-immune small-vessel vasculitis is characterized by leukocytoclastic necrotizing vasculitis with little or absent immune deposits. This type of vasculitis may represent localized disease (cutaneous vasculitis) or may involve, concomitantly or sequentially, other organs such as the kidneys, lungs, nervous and musculoskeletal system, eye and intestines. Up to 50% of patients with pauci-immune glomerulonephritis (GN) have skin changes related to vasculitis. We reviewed renal pathology archives over a 7-year period and identified 52 patients with pauci-immune GN, 18

of which had pre-existing/concurrent skin manifestations of small-vessel vasculitis. Clinical and laboratory data were reviewed as well as the results of skin biopsies where available. In addition, due to assessing the extent of the disease, Birmingham Vasculitis Activity Score (BVAS) was calculated. Of 52 patients (29 male and 23 female, age range 17-83; median 60.01) treated for pauci-immune GN at Dubrava University Hospital, 10 had pre-existing skin changes related to small-vessel vasculitis. Skin biopsy was performed in 8 patients and the most common finding was leukocytoclastic vasculitis (7/8) with focal fibrinoid necrosis (5/8). Circulating anti-neutrophil cytoplasmic antibodies (ANCA) were detected in 24/52 (46%), anti-proteinase 3 (cANCA) in 4/52 (7.69%), anti-myeloperoxidase (pANCA) in 18/52 (34.6%), and both pANCA and cANCA in 2/52 (3.8%) patients. All but one patient (BVAS index 3) with skin involvement had high BVAS index ranging from 12 to 33. Although most skin small-vessel vasculitides represent mild, self-limiting conditions, they could be the first sign of a more serious, potentially life-threatening systemic disease. The two organs most typically involved and often defining prognosis of systemic vasculitis are the kidneys and the lungs. Untreated patients with severe pauci-immune vasculitis and multi-organ involvement (presenting rapidly progressive crescentic GN and/or alveolar hemorrhage) have a poor prognosis, which may be improved by prompt therapy with immunosuppressive agents and plasmapheresis. Early diagnosis of small-vessel vasculitis and recognition of visceral involvement, followed by aggressive therapy is required in order to preserve or restore the function of vital organs.