# Vesicular Cutaneous Lupus Erythematosus of the Shetland Sheepdog and Collie

**DEFINITION**

This is an auto-immune syndrome of the Shetland Sheepdog and Collie resulting in ulcers of the groin and axilla that have undulating serpiginous borders.
etiology and pathogenesis

This condition was previously known as Ulcerative dermatosis of the Shetland Sheepdog and Collie. However, it has been determined that affected animals have circulating antibodies to extractable nuclear antigens in 82% of the cases and direct immunofluorescence revealed deposition of immunoglobulins bound to the dermal-epidermal junction in 50% of the cases. In addition, there is a T-lymphocyte-rich interface dermatitis. These findings correlate with the vesicular variant of subacute cutaneous lupus erythematosus in humans.

**CLINICAL FEATURES**
The syndrome affects adult Shetland Sheepdogs and Rough Collie breeds or crosses thereof. Lesions usually first appear in the summer months. Vesicles and bulla are the primary lesions but they are transient and may only be noted in histological sections of early lesions. Ulcers are formed over the groin, axilla, ventral abdomen, and is some cases may involve the mucocutaneous junctions and concave aspects of the pinnae. The ulcers are coalescing and may be annular but are more often polycyclic or serpiginous.
Differential diagnoses
- Bullous pemphigoid
- Epidermolysis bullosa acquisita
- Pemphigus vulgaris
- Systemic lupus erythematosus
- Erythema multiforme – toxic epidermal necrolysis syndrome
- Drug reaction

**DIAGNOSTIC TESTS**
Diagnosis is based on history, clinical findings and compatible histologic findings. Routine antinuclear antibody (ANA) testing is negative. However, in research situations special techniques can be used to demonstrate circulating antibodies to extractable nuclear antigens in a majority of cases.

**MANAGEMENT**
- The first step in the treatment is to resolve the clinical signs and the second step is the maintenance of clinical remission. Suppression of clinical signs is achieved with immunosuppressive doses of steroids. Azathioprine is generally used in conjunction with

steroids to allow for a lower maintenance dose of steroids. Once clinical signs have resolved the methylprednisolone or prednisolone dose is tapered. Azathioprine may result in bone marrow suppression and this should be monitored by performing complete blood counts biweekly for the first 8 weeks of therapy, and then quarterly.

- If secondary bacterial infection occurs, treatment should be instituted with appropriate systemic antibacterial agents.
- Sun avoidance has been advocated, although the exact role of sunlight in the pathogenesis of this condition is unknown.

**KEY POINT**

- Be aware that this is a condition that is not cured and some cases can be difficult to control.