Letters to the Editor

Aberrant expression of HLA-DR antigen in diffuse sclerosing variant of papillary carcinoma of thyroid

Diffuse sclerosing papillary carcinoma is a rare type of thyroid tumour, characterised by a diffuse disease in one or both thyroid lobes, with dense sclerosis, extensive lymphocytic infiltration and abundant psammoma bodies intermixed with islands of papillary carcinoma.[1] This type of tumour comprises 3% of papillary carcinomas and is associated with a more aggressive clinical course.[2] The pathogenic role of the lymphocytic infiltration and diffuse disease in this particular type of tumour remains unknown.

We recently studied a case of diffuse sclerosing papillary carcinoma in a 26 year old woman. The tumour exhibited diffuse spread throughout the left thyroid lobe. It showed dense sclerosis, lymphocytic infiltration, and abundant psammoma bodies intermixed with elements of papillary carcinoma with focal squamous metaplasia. To investigate the nature of the lymphocytic infiltration in this tumour we performed an immunohistochemical study with a large battery of antibodies. The lymphoid component was polymorphic and was composed of both B and T cells. The most striking immunohistochemical finding was the strong positivity of the tumour cells for HLA-DR antibodies. Normal follicular epithelial cells were negative for this antibody.

Little is known about the pathogenic importance of the lymphocytic infiltrate in diffuse sclerosing papillary carcinoma. It has been shown that the tumours contain numerous, S-100 positive, Langerhans', interdigitating reticulum cells scattered throughout the tumour islands and lymphoid infiltrate, suggesting an immunological reaction mediated by antigen-presenting cells.[3] In a recent study Kamma, Fuji and Oyata studied the importance of lymphocytic infiltration in nine juvenile thyroid carcinomas.[4] They found a clear correlation between HLA-DR expression by the tumour cells and the degree of lymphocytic infiltration. They suggested that lymphocytic infiltration is an immunological reaction induced by antigens from the carcinoma itself and that the reaction may progress according to tumour development. None of the tumours studied, however, was a diffuse sclerosing papillary carcinoma. The immunohistochemical findings in our case agree with their results and suggest that aberrant expression of class II histocompatibility HLA-DR antigens in tumour cells may have an important role in the immunological reaction in this type of tumour as it does in autoimmune thyroiditis.[5]

X MATIAS-GUIU
J ESQUIUS
Hospital de la Santa Creu i Sant Pau
Barcelona, Spain

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Cold Ziehl-Neelsen stain for Campylobacter in gastric biopsy specimens

Campylobacter can be identified in sections stained with haematoxylin and eosin but, as they stain relatively weakly and may be obscured by surface mucus, other stains are often used to visualise them.[1,2] Among the special stains used are silver methods (Warthin-Starry and Warthin-Faulkner), Romanowsky stains, the Gram Stain, and recently, the Gimenez stain.

The silver methods are complicated and time consuming and the Gram stain is unsatisfactory, leaving Giemsa or Gimenez as the best stains for routine use. We present an alternative method, based on cold carbol fuchsin as in the Gimenez technique but requiring less preparation.

Staining takes only about five minutes to complete, with the minimum of reagents, and the method has proved useful in a busy laboratory.

1 Sections to water via xylene and alcohol.
2 Stain in carbol fuchsin at room temperature for one minute.
3 Rinse in water to clear slide of stain.
4 Stain in Loefflers methylene blue at room temperature for one minute.
5 Rinse in water.
6 Wash in alcohol and dehydrate to xylene.
7 Mount in DPX.

Carbol fuchsin is made up as follows: basic fuchsin 1 g; phenol crystals 5g; isopropyl alcohol 10 ml; distilled water 100 ml.

Campylobacter stain blue and stand out clearly against a background of pale staining mucin. The mucosa stains shades of lilac, the nuclei being magenta. Coliforms also take the stain but Campylobacter are easily distinguished by their characteristic morphology.

JA HAWKINS
N GUBBAY
Pathology Department
Cheltenham General Hospital
Sandford Road
Cheltenham
Gloucestershire GL53 7AN

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Rectal carriage of *Chlamydia trachomatis* in women

The first reports of isolation of *Chlamydia trachomatis* from rectal mucosa in women in certain high risk groups showed the prevalence of rectal chlamydia infection to be 11·8%. Since then other investigators have found rates of 21% and 5·2%,[1] the difference being ascribed to the widely differing levels of admitted anal intercourse (60·9% and 4·1%, respectively) in the two groups. In a review of rectal infection in women with gonorrhoea the prevalence ranged from 26 to 63% [mean 44%].[2] As there was no history of anal intercourse in most cases autoinoculation with cervico-vaginal material was assumed.

We studied rectal carriage of *C trachomatis* in 84 women attending consecutively at a sexually transmitted disease