Potential use of specific human and chicken antibodies for detection of Hanganutziu-Deicher antigen(s) in sera of cancer patients

Abstract:

A human Hanganutziu-Deicher (HD) antibody and a chicken anti-N-glycolyneuroaminyllactosylceramide (HD3) antibody were compared in their reaction against HD antigen-active ganglioside (HD3) and a glycoprotein (GP) by radioimmunoassay (RIA). The human antibody had a 50 times higher reactivity with the glycoprotein, while the chicken antibody reacted equally with both antigens. Both antibodies had a higher reactivities with HD antigen(s) in sera of five of eight lung cancer patients than 54 normal human sera. Since four of the above five sera had no abnormal titers to GP, it was concluded that their immunological status was antigen excess. The chicken antibody may be useful in follow-up studies of cancer patients to correlate the expression of HD antigen in tissues and sera with the elevation of HD antibodies, offering alternative methods of clinical prognosis of tumor growth and/or metastases. The human HD antibody may also be useful for the detection of HD antigens of glycoprotein nature.