Department of Immunology, University Hospital of Wales

Consultants: Prof S Jolles, Dr T El-Shanawany, Dr R Cousins, Dr P Williams
Specialist Trainees: Dr M Ponsford, Dr S Wijetilleka
Immunology Clinical Specialist Nurses: E Carne, C Kingdon, C Price, T Matthews

Selective IgA deficiency (IgAD)

What is IgAD?

Antibodies (also known as immunoglobulins) circulate in your blood and are present in secretions such as saliva and lung secretions. They help the immune system fight infections. There are a number of different classes of immunoglobulins including IgM, IgA, IgE and IgG. IgA is normally present in secretions (eg lung secretions, saliva).
The importance of IgA is not clear. Large numbers of people have no IgA and yet have no illnesses or symptoms. However, a proportion of individuals with IgAD do suffer with symptoms. IgA deficiency can affect males and females and is found in all age groups.

Why does it happen?

A type of immune cell known as B cells are responsible for the production of antibodies. In the immune system there is normally constant communication between B cells and other immune cells. The point of this communication is to ensure that B cells make the right type of antibodies against the correct targets.
Why some people develop IgAD is the subject of ongoing research and the causes are not fully understood. One theory is that a problem with the communication between B cells and other cells leads to IgAD.

What might my symptoms be?

In many cases there will be no symptoms. Some people with IgAD do have symptoms which can include chest and sinus infections, allergies, autoimmune diseases and problems with the digestive tract (such as coeliac disease).

How is IgAD diagnosed?

The following tests are normally performed in investigation of IgAD:

- measuring the levels of immunoglobulins (there are 3 main classes called IgM, IgA and IgG)
- checking whether there are specific immunoglobulins present which can fight infection (we use tetanus, pneumococcus and haemophilus influenzae type b as indicators)
- if the specific immunoglobulins are low then the response of the immune system to vaccination is assessed
- counting the numbers of different immune cells in the blood – these should be normal in IgAD

What treatments can be used?

The treatments will vary according to what symptoms you are suffering and in most patients no treatment is needed. Infections are treated with antibiotics. Food allergies and coeliac disease are treated with appropriate diets (eg wheat free diet for coeliac disease).

Complications of IgAD?

You should be aware that there is an increased risk of some cancers with IgAD. Not everyone with IgAD will develop a tumour, but there is an increase in risk over the general population. Therefore, it is important that if you have symptoms affecting your abdomen they are reported to your doctor so that they can be investigated at an early stage. Such symptoms include a change in your bowel habit, passing blood, abdominal discomfort and unexplained weight loss. These symptoms would prompt us to perform tests so that any problems can be detected early and then cured.
Some patients with IgA deficiency may rarely have a reaction following blood products. If you require blood products you should ensure that you inform those looking after you.

Further information

Please ask us in clinic any questions that you have about IgAD and/or your treatment.
PID UK (Primary Immunodeficiency UK) and UKPIPS (UK Primary Immunodeficiency Patient Support) are patient groups for those affected by immunodeficiencies. Their websites are below (note that we have no editorial control for the websites and take no responsibility for their content):
www.piduk.org
www.ukpips.org.uk

Author: Dr Tariq El-Shanawany
Document Owner: Immunodeficiency Centre for Wales

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