Birdshot Chorioretinopathy
Information for patients
What is birdshot chorioretinopathy?

Birdshot chorioretinopathy (or retinochoroidopathy), normally shortened to ‘birdshot’, is a rare, potentially blinding, posterior uveitis. This is chronic inflammation of the choroid, which also tends to affect the retina and retinal vessels. It affects both eyes.

In the picture below, you can see the position of the vitreous, retina and uvea (iris, ciliary body, pars planar and choroid), which has three sections; anterior, intermediate and posterior. The dotted area represents the uvea.
Birdshot chorioretinopathy is characterised by inflammation of the vitreous (clear jelly in the eye) which causes orange, yellow or cream coloured oval shaped spots at the back of your eye on your retina. These affect the macula (an area near the centre of the retina used for detailed vision) and can cause vision loss. The reason this disease is called ‘birdshot’ is because these spots look like the pattern seen when you fire birdshot pellets from a shotgun.

What causes birdshot?

It is believed to be due to an autoimmune disease. An autoimmune disease is an illness that occurs when the body tissues are attacked by its own immune system, which causes chronic inflammation. It is most likely to develop in people aged between 45 and 55, although it can also occur in much younger and older people.

Birdshot is a relatively new disease. It was first discovered in 1949 and only given the title ‘birdshot’ in 1980. It is still widely misunderstood and often goes unrecognised and undiagnosed.
What are the symptoms?

Usually, the initial symptoms of birdshot are floaters (black dots or wispy lines that move across your field of vision) and/or blurred vision, but there is often little noticeable effect on your ability to see. However, there are cases where symptoms have appeared very rapidly; these included painful eyes, difficulty in seeing in the dark or low light, flashing lights and sensitivity to bright light.

The progress of the disease is usually gradual, with a slow and painless loss of vision in both eyes. In the initial stages, you may be able to continue to see well but might begin to experience night vision problems and difficulty seeing different colours.

Birdshot is usually chronic (it lasts a long time) and needs treatment to prevent on-going inflammation, which can lead to permanent loss of vision. If birdshot is left untreated and you continue to have inflammation, it can lead to macular oedema (a swelling of the macula layer in the eye) which causes blindness.
Diagnoses and testing

Because it is a rare disease, birdshot can often be misdiagnosed or missed altogether, particularly as the birdshot ‘spots’ are often not clearly visible in the early stages. There is no single test that can be used to diagnose birdshot. Usually, more common eye diseases are ruled out first, and then a blood test is carried out to find out whether you are HLA A29 positive (you carry the human leukocyte antigen A29- HLA-A29). The, majority of people who develop birdshot (although not all) carry this antigen.

An antigen is a substance that enters the body and stimulates the production of an antibody, to fight what the immune system perceives as an invader. Because most people who are diagnosed with birdshot carry this antigen, it may mean that they have an inherited immune dysfunction (either an overactive or weak immune response).

If you have been diagnosed with birdshot, or are being checked for birdshot, you are likely to be asked to undertake some tests. Some of these tests involve taking images of the back of your eye to find out how much damage (if any) has already occurred to your vision.
Treatment

If you have a mild form of the disease you may not require any treatment. If you have a more severe form of birdshot and need treatment, we will tailor the treatment to you, depending on the results of the tests and your medical history.

We normally treat birdshot with a combination of steroids (to reduce the inflammation) and immunosuppressant (to stop your immune system from attacking your eyes and causing the inflammation). The aim of the treatment is to find the lowest dosage of medication that will allow you to maintain your eyesight and stabilise your condition.

If this first line of treatment is not successful and inflammation re-occurs, there are several other immunosuppressant medications available which may work better.

If you are prescribed steroids, you will also be given medication to counteract any damage to your bones that steroids may cause. These are usually alendronic acid with vitamin D and calcium tablets. Please ask about these medications if you are prescribed steroids.
Useful contacts

Birdshot Uveitis Society (BUS) is part of the Uveitis Information Group and has been set up by two people with birdshot, specifically to provide help and support for people who are diagnosed with this rare disease.
Website: www.birdshot.org.uk
Email: info@birdshot.org.uk

Additional information

If you have any further questions or need advice about your treatment, please speak to your GP or your eye doctor at the Oxford Eye Hospital.

How to contact us

Oxford Eye Hospital Helpline
Tel: 01865 234 567
(Monday to Friday, 8.00am to 6.00pm)
(Saturday, 9.00am to 4.00pm)
(Sunday and bank holidays, 10.00am to 2.00pm)

Eye Hospital Emergency (walk-in service)
(Monday to Friday, 9.00am to 5.00pm)
(Saturday, 8.00am to 4.00pm)
(Sunday and bank holidays, 10.00am to 2.00pm)

Outside of working hours, please contact your out of hours GP or dial 111.
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

Authors: Miss S. Sharma and A. Afanu
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Oxford University Hospitals NHS Foundation Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information

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