Why have I been referred for gait analysis?

Gait analysis is a method for measuring walking patterns.

How does it work?

Small silver markers will be stuck on your legs and feet. A number of motion capture cameras placed around the room then record the movement of these markers as you walk along a 5 metre walkway. From this we can record:

- movement patterns of your legs and feet as you walk
- forces acting on your joints
- the activity of your muscles when you walk.

This allows us to:

- accurately measure if there are any abnormalities in your walking patterns
- work out the cause of any abnormalities when you are walking
- provide information to other people involved in your care, to help them make clinical decisions about your treatment, such as surgery, therapy, walking aids and splints
- evaluate the outcome of treatment you receive, in order to get the best results that we can.
What does a visit for gait analysis involve?

You will need to come to the Tebbit Centre reception at the Nuffield Orthopaedic Centre. You will need to bring a pair of shorts with you to the assessment, so we can observe your legs and feet whilst you are walking. Please also bring any walking aids or orthotics you are currently using.

We will start by carrying out a clinical assessment. For this you will be asked to lie on a couch and a physiotherapist or clinical scientist will assess the joints and muscles in your legs.

This will be followed by the gait analysis. You will be asked to walk up and down the laboratory a number of times with the sticky silver markers on your legs and feet. Both the physiotherapist and an engineer will be present during this assessment and may give you instructions whilst you are walking. The engineer will be responsible for collecting the data from the motion capture cameras.

The whole process may take between one and three hours.

What are the risks?

There are no major risks associated with a gait assessment. There is a small risk you may react to the tape used to attach the silver markers, which may cause a mild skin irritation and itchiness. Let us know at the start of the assessment if you have sensitive skin. However, we use hypoallergenic tape, so this risk is very low.

We will ask you to walk up and down the laboratory a number of times (normally around 10-20 times along a 5 metre walkway), so you may feel tired, particularly if the distance or time you can normally walk for is limited. We will offer you plenty of rest and breaks. Feel free to let us know if you are feeling tired and need to rest at any time during the assessment.
What happens after the assessment?

Results from your gait analysis are discussed during the weekly meeting of the Gait Laboratory team. A report is created at this meeting, which includes a summary of the data collected, as well as any treatment recommendations. This will be sent to the person who referred you for gait analysis. We will also send a copy to you, normally within 3-4 weeks. If you need any follow-up visits, these will be arranged by the person who initially referred you.

The Oxford Gait Laboratory team

The team at the Oxford Gait Laboratory is made up of a range of health professionals, including:

- Consultant Orthopaedic Surgeons
- Specialist Physiotherapists
- Clinical Scientists
- Clinical Technologists
- Healthcare Science Support Worker
- Orthotist
- Administrator
Contact details

**Oxford Gait Laboratory**
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Office hours

**Monday to Friday, 8.30am to 5.30pm**
Gait appointments are held from Monday to Wednesday.

For further information please visit the website of the Clinical Movement Analysis Society (CMAS):
www.cmasuki.org
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

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