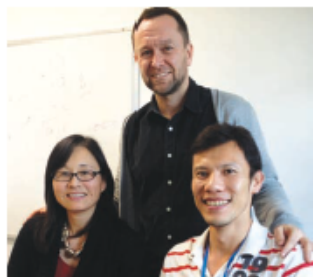


# Circulating microparticles in Behçet's disease

Behçet's disease causes inflammation in the body, including the blood vessels (vasculitis). We do not yet know what causes Behçet's disease, but we believe that a combination of genetic traits (such as a marker called HLA B51) that are found more commonly in certain ethnic groups (particularly in patients from Mediterranean areas and the Far East), in combination with environmental factors, contribute to the disease and its severity. Although the usual onset is in adulthood, the disease can and does occur in children, but the diagnosis can often be delayed. There is a spectrum of disease ranging from recurrent mild mouth ulceration to severe complications affecting other organs in the body, such as the eyes, joints, intestines, kidneys and brain. Excessive blood clots can occur in some patients, but there are no blood tests to predict which patients are susceptible to this. We therefore cannot tailor immunosuppressant or clot-preventing therapy for specific individuals.

We recently discovered that small inflammatory fragments of blood cells (microparticles) are increased in the circulation of children with other forms of vasculitis. We have demonstrated that levels of these correlate with disease activity and response to treatment. In addition, we have found that excessive microparticles contribute to a tendency to blood clotting and may be important in Behçet's disease. Intriguingly, in a number of laboratory experiments we have shown that these particles might contribute to the inflammatory process by interacting with other cells to cause inflammation and extensive blood vessel injury.

We now need to expand these exciting observations, and we plan to undertake a study to assess the relevance of circulating microparticles to the pathogenesis of childhood Behçet's disease. A single preliminary study on microparticles in Behçet's disease suggests that they could indeed be important, but so far this is an incredibly understudied area in the disease, lagging



(l-r) Dr Ying Hong, Dr Paul Brogan and Dr Sira Nanthapaisal

behind what we know about the importance of microparticles in other vasculitic diseases. So we now wish to study whether microparticles could be important in Behçet's disease.

This pilot study, funded by the Behçet's Syndrome Society, allows us to study whether microparticles might provide a new test – for instance, by detecting early vasculitis before symptoms develop or by helping us to understand which patients may be at risk of excessive blood clotting leading to thrombosis. If the results of this pilot study show promise, then we would apply for a bigger grant to study this in many more patients including children and adults. In the longer term, we hope that patients with Behçet's disease will benefit as we might be able to identify those at risk, for example, of blood clots and prevent these before they happen.

We feel very privileged that the Behçet's Syndrome Society has provided this opportunity, allowing ongoing support for one of our gifted scientists, Dr Ying Hong to drive this work forwards at UCL Institute of Child Health and Great Ormond Street Hospital, alongside Dr Sira Nanthapaisal.

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## Annual Conference early announcement

We are pleased to announce that the next Annual Conference and Annual General Meeting for the Behçet's Syndrome Society will be held on Saturday 19 October 2013. The venue is the Forest Hotel, Station Road, Dorridge, West Midlands B93 8JA ([www.forest-hotel.com](http://www.forest-hotel.com)). All members and their friends and family are invited to attend, whether you are new to the condition or are experienced at managing it. The feedback from the last conference was overwhelmingly positive, both for the medical presentations and for the opportunity to chat to other people.

This is a very central location for all our members, with easy connections whichever way you prefer to travel. It is only 15 minutes' drive from Birmingham International Airport for our members in Northern Ireland and Scotland; it is opposite Dorridge railway station, which has a direct line to London Marylebone and Birmingham; and it is 5 minutes from the M42, which links with the M5, M40 and M6. The hotel has a free car park attached, has full disabled access and welcomes guide dogs.

Although the hotel has offered us a very competitive rate for the conference, the accommodation remains quite expensive. If you would like to make a weekend of it, as Stratford-upon-Avon, Leamington Spa and Warwick are all in very close proximity, you could consider one of the local Premier Inns, such as The Barn, which is where the Trustees will be staying.

The agenda for the day will be published in later newsletters, but we will be aiming to serve tea/coffee on arrival from 10 am and start the conference at 10.30 am. The day will finish at 4.30 pm. Please keep an eye out for further details in the next newsletter and on our website.