

Completely exceeded expectations! A seldom used phrase but one that completely describes my experience at the Instituto da Criança e do Adolescente (The Institute for Children and Adolescents) in Sao Paulo, Brazil.

As the very fortunate recipient of a British Cardiac Society and Heart Research UK clinical placement I spent two weeks with the extraordinarily knowledgeable Dr Gabriela Leal, whose special interest is in echocardiography in acquired heart disease in children. The purpose of my visit was to learn best practice in strain imaging (LV and LA) in this patient cohort, with a specific focus on learning to use and interpret LA strain in patients with cardio-renal disease.

This is a more niche area within paediatric cardiology, where the focus is generally on structural heart disease and surgical interventions. Progress in AI technology has recently led to advanced functional calculations being made available on the consoles of echo machines, making measurements like LA strain available in seconds. However, these measurements are only useful clinically if they are measured and interpreted accurately. Diastolic dysfunction is notoriously difficult to diagnose in children, but LA strain has been shown to be a very useful predictor of pre-clinical diastolic dysfunction in children and young people. Following my trip, I am now able to obtain the most accurate echo images for LA strain, measure the LA strain accurately and interpret the results in various disease states.

The Brazilian health system is structured similarly to the NHS. It is a free service for all and operates with similar budget constraints. Dr Leal and the imaging cardiologists work in the same way I do, performing, reporting and advising on scan results. These similarities meant that much of what I learnt could be easily incorporated into our clinical settings and protocols. To give one example, Brazil has an obesity crisis, much like the UK. Obese Brazilian children receive echocardiograms in Brazil to assess for pre-clinical systolic and diastolic dysfunction using strain imaging. This is something we could incorporate in our clinical practice.

The intensive nature of my placement allowed me to observe, learn, read and ask questions, repeating this process each day. This was an extremely effective and efficient way to learn and understand these techniques and then apply them in clinical practice. I took copious notes, filled my desktop with PDF files of useful papers and thanked everyone with a lot of Marks and Spencer shortbread for so generously sharing their knowledge!

I would thoroughly recommend a clinical placement to anyone who has a passion to learn and the motivation to keep up to date with new technology to improve outcomes for their patients. I have come back to work invigorated and enthusiastic to implement all I have learned into both clinical practice and research in our cardio-renal patients and beyond. Thank you so much, it was amazing!