

An Echocardiographer's Perspective - It's good to talk to our patients

JAN FORSTER, CONSULTANT CONGENITAL CLINICAL SCIENTIST



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As echocardiographers, we pride ourselves on being highly skilled health care professionals, providing a unique insight into the structure and function of our patient's heart.

Echocardiography has changed a great deal over the years, I remember as a student, being advised by my mentors, to treat every patient as though they were your own family or friend. This has stayed with me throughout my career. Over the years, I hope we have become more aware of our patients needs and adapted our practice to reflect each individual. What is routine to us, is not necessarily routine to our patients and their families. Many echo departments, have sonographer assistants or support workers, who will be the first point of contact for the patient and have an extremely valuable role in setting the scene for the echocardiographer.

In congenital cardiology, we need to put our young patients and their families at ease during their echocardiogram. Scanning young babies and children presents the echocardiographer with a different series of challenges, including communicating with the child, managing understandably anxious patients and working with patients of all ages with additional needs. Many of our patients have serial echos through their lives and so this allows us to build relationships with the patient and their families. This is one of the most rewarding aspects of our job as congenital echocardiographers.

General tips to remember

- Introduce yourself to your patient and ask if they have had an echo previously.
- Confirm the identity of the patient.
- Explain the process to the patient and ask if they have any questions before you begin.
- Respect the patient's privacy and dignity whilst they undress and offer them a gown.
- Ensure they are comfortable on the echo couch and ask them to tell you if they become uncomfortable or have any concerns.
- Explain that you will ask them to move into different positions during the scan and you will take pictures from different places, this is to enable you to get the best views of their heart, not so they cannot see. You would be happy to show them the pictures at the end of the study.
- Explain that you are going to dim the lights to allow you to assess the images of their heart more clearly, a bit like going to the cinema and watching a film in the dark.
- Give an approximate length of time the scan may take.
- Explain that you may not talk to them during the scan as when they reply / talk the images are affected.
- Before you use the Doppler, tell them they are going to hear some noises and that this helps you to assess the blood flow in their heart.
- If there are two sonographers present, there may be conversation related to the technicalities of the scan or a sonographer may be having some additional training. Tell them it's fine to ask if you say anything that they are worried about. Be mindful that the patient may be listening to every word you say, so choose your words carefully.
- Explain the process of obtaining the results as per local protocol before starting the scan, and remind them of this at the end.



Fig 1 The episode 'Echocardiogram' from the BBC series Get Well Soon is a good resource for younger patients

Tips for scanning babies and younger children

- Ensure that you provide information to families about the echo. Some families find it useful to "role play" prior to the appointment.
- Provide information for parents to show them what to expect when they come for an echo. We recommend they try watching an episode of "Get Well Soon" called "echocardiogram" on BBC iPlayer (series 1 -Hospital) this demonstrates the echo in a child friendly manner
- For young babies, advise that the baby has had a feed prior to the scan so they are settled and that they have a clean nappy.
- Advise that babies and young children are wearing loose clothing so their chest can be easily accessed without removing all of their clothes or waking them up if they are asleep.
- Use a "baby bean bag" so the baby is comfortable on the echo couch during the scan.
- Lie the baby / young child on their own blanket so they have their own smells close to them
- Make the echo room appear less clinical.

- Use a gel warmer so the baby / child is not startled by the cold gel.
- Encourage parental interaction with the child to reassure the child.
- Encourage the parents to bring a favourite toy / tablet with cartoons to watch / dummies are fine to be used.
- Use distraction / sensory lights / nursery rhymes /sing / white noise.
- Don't over stimulate the child if they are content.
- Allow them to eat their favourite snacks.
- Allow them to be scanned lying on a parent if they are unsettled.
- Utilise play workers or other members of the team.
- Most children respond to having stickers at the end of the scan, but not all, some associate stickers with having hospital tests, so ask them if this is something they would like.

Tips for older children / adults with additional learning needs

- Ask the parents / carers, what the patient responds to best, adjust the scan accordingly, working with the carer.
- Be aware of any alerts on your patient electronic records such as an autism passport which will help you modify your approach.
- Explain the process in a way appropriate to the individual.
- Reassure your patient frequently throughout the scan, reinforce how well they are doing.
- Utilise distraction techniques, allow the patient to watch something they like on a phone or tablet.
- Allow sufficient time to do the study.

Document anything that you feel would help you or your colleagues next time. For example, you may start your report with "Baby was a little upset today, scanned on Mum's knee" or "Limited views obtained, ECG electrodes not applied," some patients dislike the electrodes more than the echo.

It is important to know the objective of the echo in patients that are more challenging. Whilst we always try to do a full scan utilising the sequential segmental approach, we need to be able to adapt to the circumstances of the individual and also know when we have obtained all the information that is possible on that occasion. We do not want our patients to associate having the echo as an unpleasant experience.

For a small number of patients with particular anxieties about having a scan, we work with our play workers and psychology team to build a relationship with the child, particularly if we know that serial scans are going to be required. In younger children, if we cannot obtain all the information we require, we may book them in for a sedated echo at another time. However, the majority of the time, we are able to obtain all the information required by working with the patient and their carers in a sensitive manner.

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