

Equipment Review

Lipid level testing device

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Dr Jane Barnard tests a hand-held device for monitoring cholesterol levels.

The importance of cholesterol levels in cardiovascular disease is well known and, as the public becomes more aware of the significance of cholesterol to general health, so the demand for checks is increasing.

There are various situations where cholesterol testing in-house would be very useful. It can save on sending samples to the laboratory and allows for early intervention, via dietary changes, in those you may have previously declined to test with a lab sample. It also allows for simple re-checking afterwards.

It is quick and convenient and, as we've experienced while testing the CardioChek PA machine, the patients love the fact they get an instant result. They are often less pleased about the actual figure.

Relatives of patients with known cardiovascular disease or hyperlipidaemia can also be simply and accurately screened with this machine, and it would be a useful addition to any well-man or well-woman screening clinic you may offer.



Reliability of readings

Point-of-care testing machines do have a higher variability than lab testing, but CardioChek's

results have less than 10 per cent variability, which meets the accuracy guidelines established by the National Cholesterol Education Program of the National Institutes of Health.

The general advice, however, if you get several high readings and are considering prescribing a statin is to get a fasting laboratory sample first.

To ensure you obtain accurate results in-house, I think the training provided with this machine is essential. It takes half an hour, is offered free by the manufacturer and extends to as many staff as you require. It is clear and comprehensive and will definitely improve your skills at skin-prick testing. It also, more importantly, enables you to avoid the factors that can sometimes affect results.

I would also suggest you use the capillary pipettes as recommended in the manual. Having had a go without one, there was definitely more room for error.

Ease of use

Having said all that, we were all thoroughly impressed with the machine's simplicity and speed. Readings come up within one to two minutes - just enough time in which to do a BP reading - and up to 30 are stored. If you are testing more than one parameter, you can scroll through the results.

As well as total cholesterol, the machine can be programmed to use strips that measure HDL, triglycerides, LDL, TC/HDL ratio and glucose.

The verdict

It was a pleasure reviewing this machine, which is easy to use, gives instant, accurate results, and avoids the need for sending repeat samples to the lab.

And although a number of our patients - and indeed some of our staff - are now on low-cholesterol diets, this can only be of benefit to them in the long term.

- Dr Barnard is a GP in Yately, Hampshire