serum A450 of negative specimens, which in this study was never above 0.005. 1/20 of the manufacturer's cut off value, and invariably gave no colour as determined visually. This suggests that the cut off value has been set too high, but further work is needed to confirm these observations. All but eight positive specimens produced a clear deep blue colour in the wells which gave A450 readings greater than 1.5, when measured spectrophotometrically.

In view of the generally consistent results obtained by electron microscopy and ELISA and the clear resolution of positive and negative specimens in practice we are confident that those few specimens which were weakly reactive in the ELISA and unconfirmed by electron microscopy did, indeed, have rotavirus antigen present. The single specimen which had weak rotavirus reactivity but only adenovirus demonstrable by electron microscopy probably contained both pathogens. Further studies are indicated to confirm these observations.

This ELISA test is fairly rapid, taking about one and a half hours for completion and is marketed in a form which simplifies the execution of small numbers of tests, or larger batches in the event of this being necessary. The test is reliable: incubation times were not found to be critical, in particular, prolonged delay in adding stopping solution did not produce any false positive results. Attempts to abuse the test system by introducing faeces directly into the test wells gave results identical with those obtained from previously prepared faecal emulsions. The use of the manufacturer's diluent was not critical, nor was the amount of faecal material added. Spectrophotometric determination was also not necessary for routine diagnosis, where visual determinations make the test eminently suitable for laboratories where capital equipment is at a premium. In our experience this rotavirus ELISA is the best assay available to date in terms of its versatility, simplicity, sensitivity and specificity. This makes it a good alternative to electron microscopy for those laboratories which do not have this latter facility. Electron microscopy will remain important for the foreseeable future as it provides the only "catch all" system currently available. In addition, as new assays are developed for other enteric viral infections, the need to monitor their performance using electron microscopy as the gold standard will increase.

References

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