

# Ten-year follow-up of a randomised trial of drainage, irrigation and fibrinolytic therapy (DRIFT) in infants with post-haemorrhagic ventricular dilatation

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## Plain English summary

### Drainage, irrigation and fibrinolytic therapy

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## Plain English summary

**B**leeding into the fluid spaces of the brain is a common complication of being born very early. Such bleeds often block the normal fluid flow around the brain, causing expansion of the fluid spaces (ventricles), pressure on the brain and serious disability.

The standard treatment is to drain off excess fluid with a needle. This may need to be repeated and often leads to further complications. An alternative treatment is to wash out the blood clot and clear the effects of bleeding. This is called drainage, irrigation and fibrinolytic therapy (DRIFT).

Fifteen years ago (2003–6), the new DRIFT washout treatment was compared with standard treatment in a randomised trial. A total of 77 premature babies with bleeding in, and expansion of, the brain spaces were studied. At age 2 years, the babies in the washout (DRIFT) group were doing slightly better. Fewer of them had severe learning problems than those in the standard treatment group.

In the present study, we followed up those babies we could trace to school age. We managed to examine 52 out of the 66 surviving babies.

DRIFT improved cognitive function and reduced the need for special education at age 10 years. This is the first treatment to show improved brain function in premature babies with this condition.

DRIFT treatment was slightly more expensive. However, the long-term benefits were such that, after taking into account the costs of special schooling, the treatment was probably cheaper overall.

Despite these results, it is not possible to implement DRIFT in the NHS right away. Few centres have the skills and expertise to deliver DRIFT safely and, with improvements in survival of the most immature babies, those who would be eligible for DRIFT are now even more premature than those included in the original trial. Therefore, we recommend the development of DRIFT for the NHS through a further implementation trial based in a few specialist centres.

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