# Case Presentation: The use of ICON to improve aesthetics of anterior white opacities.

McCarthy C\*, Lucey S, Parry J

(Paediatric Dentistry SHO CUDSH,

Paediatric Dentistry Specialist CUDSH

Paediatric Dentistry Consultant CUDSH)

## Background:

ICON (ICON™, DMG, Hamburg, Germany) is a minimally invasive technique for improving appearance of white, demineralised areas of enamel, following orthodontic treatment for example. The lesions look white because there is a scattering of light at the subsurface of the demineralised enamel and may have genetic, environmental or chronological aetiology. The technique improves the aesthetic appearance of porous enamel by infiltrating the enamel with a low viscosity resin which reduces light scatter. Here we present a case of demarcated opacities treated with microabrasion and ICON infiltration.

### Presenting complaint:

Highly visible incisor opacities resulting in negative self-esteem in a fourteen- year-old girl. The creamy white lesions were on the incisal third of her maxillary central incisors. There was a history of trauma to the primary incisors at approximately 2 years old, which was thought to be the causative factor. The patient was very conscious of the appearance of these teeth.

#### Clinical management:

An initial treatment of microabrasion was carried out but with very little improvement in the aesthetic result and the patient was not satisfied. ICON resin infiltrant was used, which involved 3 applications of 15% hydrochloric acid etch following by low viscosity resin infiltration. Resin infiltrant treatment and subsequent polishing carried out with polishing discs resulted in improved appearance with reduction in visibility of the opaque areas.

#### Discussion:

ICON is a viable, conservative treatment option for patients with white spot lesions. The treatment is particularly relevant for paediatric patients, for whom tooth whitening is legally not an option and where the use of anaesthetic and instrumentation may not be desirable. The ICON technique can be combined with microabrasion with successful results.