Innovation in local dental anaesthesia: part 1

Tony Beale describes the range of syringes from the Danish manufacturer Ronvig

The Ronvig Aspiject syringe

The Ronvig company was established in Denmark over 25 years ago, and is recognised as a leading manufacturer of high grade syringes for dental anaesthesia. Their products have now become well established in over 40 countries worldwide, and are distributed in the UK by Optident Ltd.

The company also produces several other innovative items that are designed to assist restorative dentists in their use of composites and other associated materials, and in this two-part feature their most popular products will be described. Part one will be devoted to the Ronvig products that are used in dental anaesthesia.

Dental anaesthesia demands extreme care and attention, and for many patients their greatest fears can be realised when they are faced with the prospect of having to undergo anaesthesia via a needle injection.

Dental anaesthetics have been administered via syringes since the 19th century and have proven to be an effective way to induce effective anaesthesia. However, technology has enabled progress to be made as regards the design and function of these syringes and Ronvig have played a significant role in developing and manufacturing unique syringes for dental use.

The ASPIJECT Active syringe

This syringe has been designed specifically for infiltration and block anaesthesia. It was developed in cooperation with Dr Hans Evers, and other Swedish dental practitioners and was introduced in 1981. It incorporates several features that can assist the user in the effective application of local anaesthetics.

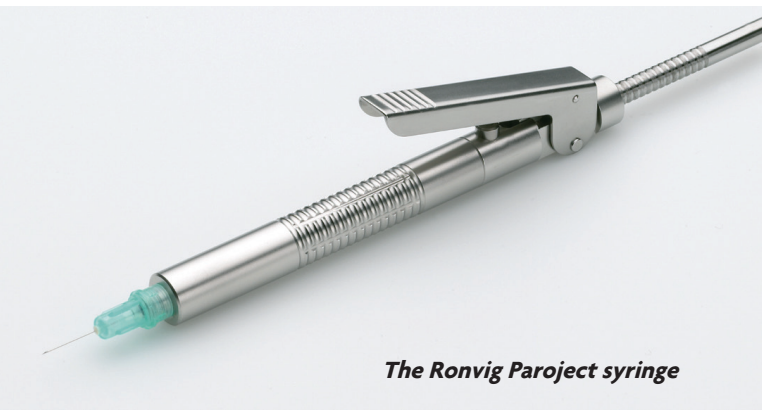
As the name Aspiject implies, it allows drawback aspiration, creating a negative pressure in the cartridge, thus preventing any intravascular injection. The syringe accepts standard anaesthetic cartridges, which can be side-loaded, and an intelligent, self-tapping spiral hook allows effective penetration through the cartridge. The syringe piston has a new ergonomic thumb grip, and the 'no friction' surface permits easy withdrawal.

It must be remembered that correct maintenance of the Aspiject is essential, and it should always be thoroughly cleaned and sterilised. Its construction from acid - resistant materials will allow regular autoclaving, being capable of withstanding temperatures of up to 200OC.

The Aspiject SIS syringe

This version of the Aspiject allows the syringe to become a completely Sterile Injection System (SIS), and it is also designed for use in infiltration and block anaesthesia, offering operators an alternative to single use injection syringes. Its main purpose is for surgical procedures, especially where specific attention to sterility and cross- contamination is essential. The syringe has a fully autoclaveable transparent barrel, and is particularly suited to use in situations where reliable one-hand aspiration can prove difficult.

The Aspiject SIS syringe



The Ronvig Paroject syringe

The Ronvig Paroject syringe, showing correct hand grip

Paroject

Where PDLA (Periodontal Ligament Anaesthesia), is indicated, the Paroject syringe can prove to be ideal . This clever, compact and user- friendly syringe can deliver slow, non- traumatic injections via its delicate pen-like body which is made from high grade and acid resistant stainless steel , and will accept standard 1.8ml anaesthetic cartridges.

PDLA offers patients a less intimidating method of injection, with gentle pain control and no sensation of numbness in tongue, lips or cheeks. It allows a minimal dose of anaesthesia to be administered, and is recommended for haemophiliac patients, when conventional injection techniques are contra-indicated. The Paroject's slow 'click' delivery method also allows only a minimal dose of only 0.06ml per click, and can be used as an alternative to conventional palatal injections.

Paroject offers much versatility of use, and where single tooth anaesthesia is indicated, i.e. for simple extractions, cavity preparations and for endodontic anaesthesia, will produce immediate onset, without soft tissue numbness. It can overcome failed conventional methods, and can also act as an effective and efficient supplement to insufficient blocks or infiltrations, with the possibility of being able to treat teeth in more than one quadrant at a single treatment session.

In order to further reduce any patient trauma, the application of Ultracare, a 20% Benzocaine topical anaesthetic, also available from Optident, can be used prior to injections. It has a rapid onset of 10 – 20 seconds, and can last for eight to ten minutes, permitting further injections to be given.

The Ronvig products succeed in offering a variety of choices for dental practitioners that require high quality, reliable, and effective syringes for the regular application of local anaesthetics, and all the products described carry a five-year guarantee in respect of materials and construction.

For details of all Ronvig products contact Optident Ltd, International Development Centre, Valley Drive, Ilkley, LS29 8AL. Tel: (0044)01943 605050 Email: sales@optident.co.uk www.optident.co.uk