"I’m in love"

Why dentists prefer to use AquaCare

Abrasions have long been discussed as a treatment in all areas of dentistry. With AquaCare, UK-based Velopex International has introduced an innovative and contactless way to abrade and polish teeth. The unit combines four powder cartridge systems with an easy-to-use multifunction handle—what can even double via the foot controls as a 3-in-1 application for periodontists, endodontists and orthodontists?

AquaCare is capable of delivering abrasing and prophylaxis media all via the same handpiece. Why buy a separate unit when all one needs is to change the cartridge? Our multi-patient cartridge concept provides the clinician with the capability of either changing the cartridge (approximately 40 seconds) on the AquaCare or changing media at the flick of the switch (1 second) on the AquaCare Twin. Whatever the option? Our cartridges are colour-coded for easy recognition: 29 alumina oxides (blue), 53 µ aluminium oxide (red), sodium bicarbonate (white) and 5 µ desensitising and remineralising powder with 99.5 percent NaHCO3 (white, 3 per cent) in NUPRO Extra Care toothpaste. This selection provides the clinician with choice, freedom and flexibility to interpret the clinical situation and provide his or her patients the potential to revolutionise common dental treatments, such as cutting, caries removal, cavity preparation, cleaning and polishing. What is your vision?

All the clinician requires is an air line, which all dental practices have; everything else is provided in the AquaCare introductory kit.

Fig. 1: Dr Faouzi Venuti used 53 micron aluminium oxide, then used electrosurgery and isolated by means of Ferrior Clamps and teflon. The image is after sandblasting.

AquaCare is an invaluable tool in the process of tooth stain removal. It is less invasive for the patient and reduces the need for drilling.

Across the world, contactless interactions are common in our daily life. Now dentists can offer patients contactless dentistry. Good preventive dentistry and oral health care can help prevent cavities, gingivitis and periodontal disease, keeping patients’ smiles happy and healthy. Our patient leaflet serves to aid the dental health care professional to explain the gentle effect of AquaCare on the patient’s teeth and gums. Patients know about contactless and enjoy the speed of interaction, and research indicates that consumers are likely to spend more money owing to the ease of interaction. A practice that introduces, for example, “Power Clean” under the brand of contactless dentistry might benefit in this regard too. Contactless dentistry is not exclusively for prophylactic treatments. Other treatments include preparations for Class V cavities, use in orthodontic de-bonding and bracket removal and abrasion of occlusal brown spot lesions prior to fissure sealing (without the needle) —another practice-building enhancement, emptying on the UK NHS to 3 UDA’s.

Fig. 2: Dr Th omas Taha used AquaCare 53 micron aluminium oxide cutting powder to remove fractured and decayed hypomineralised tooth tissue only without the need for drilling.

Velopex International has coined the term “contactless dentistry”. Does contactless dentistry really work? Dr Walter Devoto, founder of STYLE ITALIANO, with the AquaCare Twin unit: “Finally, the sandblaster of my dreams!”

Velopex International will present AquaCare at the coming Dentistry Show in Birmingham. Right before the event, Dental Tribune talked to Keith Morgan, Sales & Marketing Manager, about the next big step in Contactless Dentistry.

Dental Tribune: Many dentists in the US and Europe still prefer rotary cutting instruments and their use has been taught at dental schools and faculties for many years. Why do you see a need for change?

Keith Morgan: Dentistry is continuing the transition from mechanical dentistry to adhesive dentistry. A growing number of clinicians, academics and key opinion leaders are accepting that fluid abrasion enhances the tooth surface for increased efficacy of bonding—it is also an invaluable tool in the process of tooth stain removal.

It is less invasive for the patient and there is no noise, vibration, generation of heat or creation of any unpleasant smells. This process is inexpensive, quick and incredibly effective. Many dental schools teach abrasion techniques, including those in Germany, the world’s second largest dental economy. Elsewhere, abrasion is taking hold and some leading dental institutions now have an MSc programme.

Apart from the dentist’s perspective, patients too are driving the change. Air polishing and fluid abrasion are more convenient and safe for patients. We have prepared a leaflet for patients that answers frequent questions about our technology. Dr Walter Devoto, founder of Styleitaliano and a leader in aesthetic and conservative dentistry, appears in the image. The moment, he received the AquaCare unit, he simply said: “Finally, the Sandblaster of my dreams! It is really what We needed!” After two weeks, he could say was: “I’m in love”! He loves it because his patients love it. AquaCare has become the official partner of Styleitaliano and it will soon be publishing cases on www.styleitaliano.org.

What is the basic mechanism of AquaCare and how does the hand-piece work?

Our handpiece is at the centre of fluid abrasion. The unique Venturi design tip allows for the solution to be kept separate from the powder and air and never clogs. This single-use tip delivers a gentle stream of solution and media directly to the tooth surface. The AquaSol fluid is dispensed from an inverted bottle. This dual purpose solution also acts as a cleaning agent for the AquaCare while providing a pleasant aroma for the patient.

What are the major advantages of the AquaCare and AquaCare Twin systems for general dentists? Could you also explain the areas of preferred solution. Increasingly, clinicians are using 5 µ for periodontic, endodontic, orthodontic, cleaning and paediatric treatments. Only in AquaCare units can one change settings of pressure, solution and medium to allow one to remove stains at 275 bar (275 kPa), clear fissures by abrading and cutting at around 0.5 bar (500 kPa) and work subgingivally at around 1 bar (1000 kPa) minimum pressure with solution required.

Important note: In order to work subgingivally the pressure must be reduced while remaining 3-5 mm supragingival.

Dr Jason Smithson: Particle abrasion with 29 micron alumina to remove prismatic enamel and improve bond strengths prior to no prep direct bonding to close black triangles which were secondary to periodontal disease.