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# air polishing



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# how to guide

## air polishing



**Bal Chana**  
Deputy Principal Hygiene  
and Therapy Tutor,  
Bart's and The London.

Since I bought my new Cavitron™ Jet Plus™, I have loved the air polishing feature! As the air polisher is combined with the scaler, it is quick and easy to switch from one system to the other. In general my patients prefer air polishing to traditional stain removal methods because the result and feel is so much better. The initial investment into a Cavitron™ Jet Plus™ is soon recuperated because of the popularity of this extra service you can provide to your patients.

The key thing to remember when air polishing is to avoid the gingivae. This can be achieved by always turning the tip of the prophy insert to point away from the gingivae. Also, maintenance of the unit and the insert is important. Make sure you clean out the insert as shown in the guide and empty the powder bowl daily to ensure the system doesn't clog.

The main benefit of air polishing is how quick it is. It is also very versatile... you can use it as a post-scale polish, on patients with extrinsic stains, and in preparation prior to sealant placement or etching procedures.

Enjoy reading this How to Guide to find out more.

### Objectives

Upon completion of this guide, the clinician will be able to do the following:

- Understand how to air polish and the precautions that need to be taken.
- Understand how to maintain the equipment to ensure longevity and reliability.
- Appreciate the benefits to patients and the practice.
- Understand the differences in air polishing powder.

### Clinical Studies available upon request Always read the manufacturer's full directions for use

#### Contra-indications/Warnings

Patients who have severe respiratory illness, hypertension, renal insufficiency, the use of diuretics.  
Cavitron™ PROPHYJET Prophy Powder is a water-soluble Sodium Bicarbonate powder. Therefore, this powder is not recommended for patients on a sodium-restricted diet. Patients wearing contact lenses should remove them prior to air polishing treatment. Avoid use on cementum or dentin. Direct contact of prophy powder with surfaces and marginal areas of dental restorations should be avoided.

### The Air Polishing Powder

There are two air polishing powders available that are compatible with the Cavitron™ Jet Plus™:

PROPHYJet™ is a water-soluble sodium bicarbonate powder with a mint-flavoured taste. It allows excellent stain removal. A clinical study reported that it is no more abrasive on the enamel than rubber/prophy cup and pumice.\*

The JET-Fresh™ powder is made from aluminium trihydroxide giving a fresher, non-salty taste for the patient and can be used on patients with a sodium-restricted diet. Because of the ingredients, the possibility of the system from "clogging" is reduced compared to other powders.



\* Hosoya Y, Johnston J: Evaluation of various cleaning and polishing methods on primary enamel. J Pedod 13:253-269, 1989.

### Equipment Maintenance

To reduce the risk of problems with your Cavitron™ air polishing system please follow the tips below:

- Cavitron™ prophy powders are specially formulated for use in Cavitron™ air polishing systems. Do not use any other materials in the air polishing powder reservoir. Any other substances or additives may clog the system and will void the warranty.
- For your convenience, the prophy powders are supplied in bottles. Keep stored in a location that does not exceed 95°F/35°C. Do not allow the powder to be in contact with moisture as this could cause the powder to clog. Shake the powder bottle well to create an even consistency of powder mixture. Do not fill above the top of the centre tube in the powder bowl.
- A special container is provided with your system for use in emptying the powder bowl. It is strongly recommended that the powder bowl be emptied at the end of each day. This will reduce moisture absorption and minimise clogging.
- With the Cavitron™ air polishing system OFF, unscrew the powder bowl cap. Verify the powder bowl is empty. Turn the system ON for 15 seconds to eliminate residual moisture in the lines. Turn the system OFF.
- Remove residual prophy powder from the cap and bowl threads using a soft brush (toothbrush). If not removed, caked powder in threads can result in thread wear and powder bowl cap disengagement.
- The use of an air dryer on the compressor line supplying the system will prevent condensation from forming in the airline, which in turn may cause "caking" of the system.

### What is air polishing?

A controlled stream of air, water and sodium bicarbonate, which passes through a mixing nozzle to allow polishing of the enamel of the tooth. Sodium bicarbonate is a mild polishing agent.

**Note:** Air polishing should be differentiated from air abrasion, which uses an aluminium dioxide abrasive to remove tooth structure prior to the placement of restorations.

### Indications for use

- Removal of stubborn stains
- Removal of plaque and debris
- Prophylaxis of orthodontic patients
- Sealant and bonding preparation
- Root detoxification during periodontal surgery
- Implant maintenance

### Air polishing technique



1 Place the prophy powder into the powder bowl. (Using either the JET-Fresh™ or PROPHYJet™).



2 Select the appropriate amount of powder (low, medium or high) using the dial on the air polishing system's powder bowl. Use more powder for heavy stains and less powder for light stains.



3 Use your hand and the patient's cheeks/lips to contain aerosols.



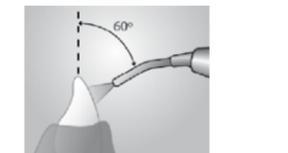
4 Maintain a 2 to 4 mm tip-to-tooth operating distance. Keep the tip in constant circular motion and maintain a sweeping motion from interproximal to interproximal.



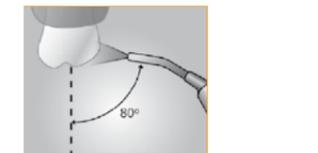
5 Inspect the work site before proceeding to the next 1-3 teeth. If desired, the bleed air passing through the air polishing insert tip can be used to dry the work site during inspection (Foot Control released).



6 When air polishing the anteriors, centre the spray on the middle third of the tooth. The edge of the spray will clean the teeth to the gingiva.



7 Recommended angulation on the anterior teeth is 60° with the tip aimed at the middle third of the tooth surface.



8 Recommended angulation on the buccal and lingual surfaces of posterior teeth is 80° with the tip aimed slightly distally.



9 Recommended angulation on occlusal surfaces is 90°.



10 Use tool supplied with the prophy insert to ensure that the insert does not clog.

### Marketing Tips

Why not promote air polishing to your patients?

- Display before and after photos in the reception area; for example on a digital photo frame.
- Advertise this as a "special service" for weddings, gifts etc.
- Get the reception staff to talk about it to patients.
- Promote alongside other aesthetic dentistry such as composites like Esthet.X™.
- Use air polishing as a pre-bleach prophylaxis.



before



after