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There is a delicate balance between prevention of a sodium hypochlorite accident and optimal débridement of a canal system. The European authors favour diluting NaOCl to 0.5%. However, this severely compromises the effectiveness of NaOCl. Instead consider the following protocol with full strength sodium hypochlorite:

- Accurate working length determination
- Avoid over-instrumentation of the apical constriction
- Use a 30 gauge side-vented needle 1 to 3 mm short of working length (WL)
- Ensure flow is easy and steady prior to using intra-orally
- Slow injection with only light and constant pressure on the plunger in the chamber and then slowly introduce into the canal
- Observe NaOCl exiting the orifice and chamber
- Stop injecting at least three seconds before removing the needle from the canal as there is a delay before the extrusion of NaOCl stops
- Ultrasonic or sonic irrigation are both safe even at 1mm short of WL
- Avoid active manual irrigation with a GP cone
- Rotary instrumentation at WL is less likely to result in extrusion than hand filing
- Do not irrigate if the needle is binding against a canal wall

Small gauge needles are efficient at delivering NaOCl to the apical portion of the canal. However, more pressure is required to make the NaOCl flow through the needle resulting in higher velocity extrusion. Thus, it is critical to press the plunger slowly and constantly with no fast or forceful motion. These steps were devised to enable a safe delivery of full strength NaOCl to the apical portion of the canals you treat.

Negative pressure irrigation systems are an almost a fail-safe alternative to ensure irrigants reach the apical portion of a canal. However, such systems are costly and do not eliminate the need for sonic or ultrasonic activation of the irrigant.

When irrigating, walk with a light step and carry a small gauge needle. Unlike the Jedi do not use the force to overcome the dark side!

Regards,



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*Thank you to  
Dr. Asef Karim for  
his generous donation  
this month! !*

Together we have raised over eighteen thousand dollars for cancer research!

Well done everyone.

For more information about my ride and the Better Outcomes dental team please visit [www.endodonticcentre.com](http://www.endodonticcentre.com).



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