Small Scope Arthroscopy and Breakages

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Wrist arthroscopy has been used for diagnostic purposes since 1979 with therapeutic applications following shortly thereafter. As the use of small diameter (1.9 mm) scopes for wrist and finger arthroscopy increases, the logistics of the common complication of broken scopes prior to surgery should be considered. We would like to report how frequently scopes break due to fragility. During twelve carpometacarpal joint arthroscopies, three 1.9-mm scopes were broken before the surgeon had even handled the instrument. In one case, the scope was taken out of the sheath and was already broken. Two further scopes were broken when being placed into their isolation drapes. This is of concern as the patient is already anaesthetized when placing the scope into the drape, so if a spare scope is not available, this would expose the patient to a pointless anesthetic. In all cases, it was fortunate that a secondary scope was available, although a colleague in Hong Kong described a case where two scopes were broken in one operation! Of note, a maxillofacial 1.1-mm scope was used in one case to good effect. We would suggest the following recommendations for all surgeons undertaking small scope arthroscopies:

1. Careful handling by all staff when passing the plastic casing and training to understand the delicacy of the scope.
2. Keep the scope camera inside the trocar to provide additional protection.
3. At least one backup scope is essential.

Conflict of Interest
None.