Innovative method of intralesional drug delivery in nodulocystic acne



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THERAPEUTIC CHALLENGE

Most cases of nodulocystic acne do not require aspiration before intralesional corticosteroid injection. However, in extreme circumstances, when the cyst is already tense, the appropriate amount of the drug cannot be injected without aspiration of the cyst. Unfortunately, aspiration and injection of drug by a single syringe is not possible because this causes contamination and dilution of the drug to be injected; moreover, the syringe needs to be changed during the procedure, causing slight maneuvering of the needle, which is cumbersome to the physician and painful for the patient.

SOLUTION

This problem can be overcome by using a modified method of intralesional drug injection with a 3-way cannula (Figs 1 and 2). A hypodermic needle of the desired size is connected to 1 end of the 3-way cannula. A syringe loaded with steroid/drug is connected to the second end of the cannula, and an empty syringe is connected to the third. The needle is inserted into the cyst cavity and aspiration is done with the empty syringe. After aspiration, the knob of the 3-way cannula is rotated so that the syringe filled with pus/serous aspirate is closed and the other channel of syringe containing steroid is opened. The drug can now be easily injected into the cyst without any resistance. By this technique, contamination and dilution of the drug is avoided. It also decreases the amount of maneuvering required by eliminating the need to change syringes, thereby reducing the pain.



Fig 1. 3-way canula being used for aspiration and drug injection.

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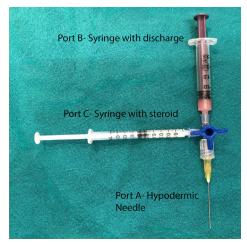


Fig 2. Components of the 3-way canula unit.