

MULTIPLE USE OF DISPOSABLE INSULIN SYRINGES IN THE SAME PATIENT

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Introduction

Disposal syringes have brought a revolution in the control of serious transmissible diseases by parenteral route for example serum hepatitis, where the carrier of "E" antigen has a transmission risk of 35%.^{1,2}

Diabetes Mellitus is a lifelong disease and in a country like our insulin dependent poor diabetics find it expensive to use a fresh insulin syringe for every injection. The cost of treatment is the principal reason for failure of compliance in developing countries like ours. Considering the above facts, a trial was organized with the aim to use repeatedly a disposable insulin syringe and needle in the same patient.

Methodology

A trial was conducted between January, 1987 to June, 1987 on 15 patients, taking twice daily insulin. Patients were seen at monthly intervals. The insulin syringes were inspected, patients were interviewed and on each visit they received the following instructions: —

1. Site should be cleaned with methylated spirit.
2. The needle and the rubber cap of insulin bottle should not be touched.
3. After each injection they should re-cap the needle and place the syringe in a clean glass container.
4. First draw the soluble and then the long acting insulin.

All patients were told to report immediately if any tenderness, redness or swelling occurred at the site of injection and to change the syringe when the markings were no more visible and the needle when it got blunt.

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Results

Case No.	No. of Days	
	For Each Syringe Used	For Each Needle Used
1	8	3
2	21	6
3	28	6
4	25	3
5	15	5
6	24	6
7	23	3
8	30	8
9	34	4
10	16	3
11	42	10
12	34	7
13	25	6
14	14	4
15	20	4

The mean duration of the syringe and needle in-use was 23.9 and 5.26 days respectively.

Conclusion

The conclusion of this small trial is that the cheap ordinary 1ml disposable insulin syringe can be safely used repeatedly by the same person without the risk of infection till such time the markings on the syringe start to disappear.

This trial gives us the confidence to recommend the repeated use of disposable syringe in the developing countries with meagre health resources.

REFERENCES

1. Oli, J.M. Disposable Syringes for Insulin Injection Br. Med. J., 1979, ii 273.
2. Hodge, R.H. Jr., Krongaard, L., Sande, M.A. and Kaiser, D.L. Multiple use of disposable Insulin Syringe Needle Units. JAMA, 1980; 244: 266-7.