

Why should anyone discard the needle after a mandibular block injection?

During the economic downturns, dental professionals are forced to cut costs. Some dentists save the needle after an inferior alveolar nerve block injection in case the injection was not successful. The success rate for the inferior alveolar nerve block, commonly referred as mandibular nerve block, is around 80% to 85%. Because of the slow onset of paresthesia and a substantial failure rate, there are temptations to recap the needle and give another mandibular block using the same needle later if necessary.

However, disposal of the needles immediately after completion of injections is recommended, especially after multiple injections. If the patient requires another mandibular block injection a few minutes later, then a new needle should be used. Recapping and saving the contaminated needle on the dental tray for future use is not justified because the risk of the needle stick injury outweighs the cost of a dental needle.

Also, once a needle hits the bony surface, the very tip of the needle becomes blunt. A dull or bent tip would cause unnecessary tissue trauma and discomfort for patients. And the patients will remember the painful injections and may seek any future dental treatments elsewhere.

Cost analysis of missing mandibular block:

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| The average cost of 50 lidocaine w/ epi — \$24.50 | The cost of one cartridge — \$0.49 |
| The cost of 50 articaine cartridges — \$38.00 | The cost of one cartridge — \$0.76 |
| 2 employees with combined wage of \$30/hour (wages) | The cost of waiting additional 5 minutes — \$2.50 |
| Rent and utilities of \$3000/month and working 40 hr/week | The cost of waiting additional 5 minutes — \$3.95 |
| The cost of dental needle _____ | \$0.11 |

The cost of giving the patient another mandibular block injection and waiting an additional 5 minutes for the onset of paresthesia from the second injection is \$6.94 when you consider the wages, rent and another cartridge. After giving a mandibular block, immediate disposal of the used needle is prudent and wise. Rather than trying to recap the used needle, more attention should be given to the proper mandibular block in the first place. **The practitioners should not risk needle stick injuries on themselves or their staffs because of one contaminated needle.**