

The Crisis Development from Improper Using of Antibiotics

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Antimicrobial drugs are chemical substances produced by fungi or bacteria for killing or inhibiting the activity microorganism. Because of the laboratory development, the term of antibiotics now applies to both naturally produced substances and those drugs were synthesized in the laboratory [1,2].

In appropriate using of antibiotic therapy may leading to develop more antibiotic resistance bacteria, this may lead to crisis in the health service [3-6].

As a dental professional, unfortunately we found some of professionals were prescribing unnecessary large quantities of antibiotics in outpatient setting. For example, patient with severe pain in his left lower 6 went to different dentist, they prescribed for him different types of unnecessary antibiotics because of pulpitis with PA periodontist without response, because of the bacterial resistance and conflict of actions [7].

If our respected colleague's follow the guidelines of using antibiotics, they can relief the pain and minimized the infection by simple method immaterial will come out with proper irrigation with using local measurement of treatment rather than systemic measurement (Figure 1 and 2).



Figure 1: Different types antibiotics and pain killer prescribed for one patient.

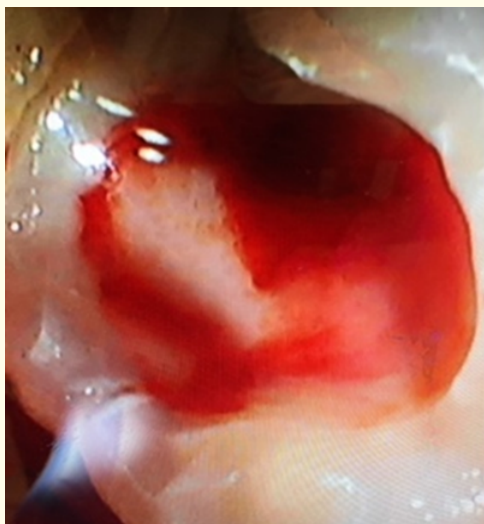


Figure 2: Local treatment will help to decrease the patient's suffering and reducing the need for antibiotics. (pulp extirpation with heavy irrigation).

Improper using to the antibiotics without guideline will be leading to develop more resistance microorganisms and will leading to major crisis on health and economy. The most common crisis for misusing of antibiotics are developing of different types of allergy, resistance of microorganisms to the treatment, spreading of infection, and other systemic complications [8-12].

Mini guideline for prescribing the antibiotics [13,14]:

- 1- Proper diagnosis will help for choosing the proper medication.
- 2- Prescribe when you feel there is clear clinical benefit for the patient.
- 3- Check the narrow spectrum rather than broad spectrum antibiotics when the narrow spectrum is effective.
- 4- Minimizing using of antibiotics using local treatment for reducing the infections.
- 5- Follow the antibiotics prescription guidelines will minimize the risk of drugs interaction, allergy, and resistance of microorganisms' and will save health and money.

Bibliography

1. Keyes K., *et al.* "Antibiotics: mode of action, mechanisms of resistance and transfer". In: Torrance ME, Isaacson RE, eds. Microbial Food Safety in Animal Agriculture Current Topics. Ames, IA, USA: Iowa State Press (2003): 45-56.
2. Rebecca M Roberts., *et al.* "Antibiotic prescribing by general dentists in the United States, 2013". *The Journal of the American Dental Association* 148.3 (2017): 172-178.
3. Haddy Sallah., *et al.* "An evaluation of dental antibiotic prescribing practices in the United States". *The Journal of the American Dental Association* 148.12 (2017): 878-886.
4. Fawziah Marra., *et al.* "Antibiotic prescribing by dentists has increased: Why?" *The Journal of the American Dental Association* 147.5 (2016): 320-327.

5. Health and Social Care Information Centre. Prescription cost analysis - dental data 2015 (2016).
6. Garima Kapoor, *et al.* "Action and resistance mechanisms of antibiotics: A guide for clinicians". *Journal of Anaesthesiology Clinical Pharmacology* 33.3 (2017): 300-305.
7. CDC. Biggest Threats and Data (2013).
8. Michael Gross. "Antibiotics in crisis". *Current Biology* 23.24 (2013): R1063-R1065.
9. Laura JV Piddock. "The crisis of no new antibiotics-what is the way forward?" *Lancet Infectious Disease* 12.3 (2012): 249-253.
10. Gian Maria Rossolini, *et al.* "Update on the antibiotic resistance crisis". *Current Opinion in Pharmacology* 18 (2014): 56-60.
11. Neha Saini, *et al.* "Misuse of antibiotics: A potential threat". *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* 13.7 (2014): 68-72.
12. <https://bda.org/dentists/advice/Pages/Antibiotic-prescribing.aspx>
13. CDC. Adult Treatment Recommendations.
14. NICE. "Antimicrobial prescribing guidelines".

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