

Impact of Ig Y Over Anaerobic Bacteria to Treat Periodontitis: Case Report

Patrascu Ionel Victor¹, Lucica Sima², Violeta Cristea³ and Cristian Macau^{4*}

¹Senior Scientist (1991), Institute of Virusology Stefan S. Nicolau, Bucharest, Romania

²Veterinary Doctor, Head of Scientific Research Romvac, Bucharest, Romania

³Physician Scientist in Laboratory Medicine, Head of Microbiology Department Synevo, Romania

⁴Oral Surgery, Periodontics Specialist, Bucharest, Romania

***Corresponding Author:** Cristian Macau, Oral Surgery, Periodontics Specialist, Bucharest, Romania.

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Abstract

This study has the main purpose of proving that the era of antibiotics might come to an end but the fight against bacteria will continue. There are more efficient ways to treat an infection and this can only be by knowing exactly what type of bacteria is causing the infection.

Patients diagnosed with Periodontitis identified with bacteria belonging to the Red Complex of anaerobic species were treated using IG Y. The whole protocol from prelevation of the samples to delivering the final product took 60 days, time needed for the IG Y to be delivered by the hens and then given as a 3 to 4 weeks treatment to the patient as egg powder or raw eggs.

Keywords: Ig Y; Periodontitis; Anaerobic Bacteria

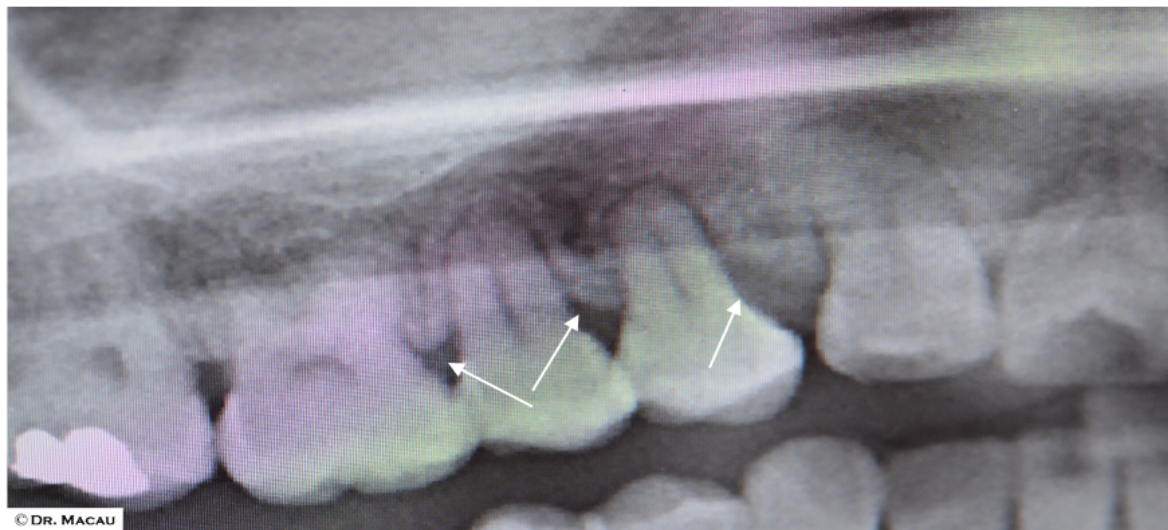


Figure 1

Introduction

The report of WHO (World Health Organisation) which targets Antibiotic Resistance reveals that this is not a matter of the future it is a real problem happening at the moment in the whole world and has the potential to affect anyone anywhere [1].

Periodontitis is inflammation of the gums and supporting structures of the teeth. It is one of the most common human diseases [2].

As antibiotic resistance is turning into a real problem, new ways of treating Periodontitis and fighting against bacteria need to be developed. This study is about a more developed way in treating Periodontitis using only Ig Y antibodies that are tailored made according to each patient's bacteria causing the disease.

Ig Y passes through mucosa due to a molecular phenomenon produced by Ig A or FcRn. This Transfer is made either as Ig Y (Ig G) having 180k Daltons dimension or as Fab having a dimension of 65 - 70 kDa [3].

Cause of Periodontitis

Periodontitis is known to have many causes which can be related to general problems such as diabetes, hormonal disorders, immunodeficiency which first attack the gum and then progress to the ligaments supporting the tooth.

Periodontitis is caused by certain bacteria (known as periodontal bacteria) and by the local inflammation triggered by those bacteria.

Although these periodontal bacteria are naturally present in the mouth, they are only harmful when the conditions are right for them to increase dramatically in numbers. The more dangerous bacteria are able to thrive and multiply, producing some harmful by-products which stimulate the body's defensive inflammatory response in the gums. As the disease progresses, chronic inflammation causes the bone of the jaw to be destroyed and the teeth to be lost [2].

Other factors that can cause Periodontitis and are extremely common nowadays are: Stress, Smoking, Bad oral hygiene and a Diet which lacks fruits and vegetables (vitamins).



Figure 2

Bacteria as the main problem or secondary effect?

As some researchers used to call Periodontitis as being an „inflammatory disease”, bacteria involved holds a very important role.

Bacteria as any living creature knows how to survive and develop no matter the environment and studies have shown how wise bacteria can be.

Obviously studies have shown that with an intense antibiotic treatment using Metronidazole, Doxycycline, Amoxicillin or even cocktails of antibiotics, Periodontitis side effects started to reduce for a while. After the antibiotic effect wears off, Periodontitis returns bringing the main problem of loose teeth. Bacterial development can be moderate or fast, leading to more or less aggressive side effects depending on the immunity of the patient.

This is why certain factors that affect immunity directly, change the pH of the blood and facilitate bacterial growth so we can talk about bacteria as a Secondary Effect.

Antibiotic resistance - What happens when antibiotics stop working?

Antibiotic resistance is not a surprise anymore and doctors find this phenomenon more common than before as bacteria has managed to fight antibiotics.

In patients where antibiotics were used to treat even a minor flu, bacteria can become resistant which means that is not affected anymore by the antibiotic treatment.

As the future is supposed to no longer belong to the Antibiotic Era, A new solution needs to be found.

IG Y - The new natural antibiotic produced by immunised hens used to treat periodontitis

IG Y is a strong antibody (immunoglobulin) usually found in reptiles and birds with a high concentration in the Yolk of the egg [4].

Ig Y blocks the multiplication of germs in the oral cavity, boosting the immunity and reducing the inflammation preventing also the autoimmune diseases and cardiovascular diseases [5,6].

Case Report

In 2017 Dr. Cristian Macau has managed to take samples under anaerobic environment from 2 patients suffering from generalized periodontitis.

Collaborating with 2 labs: One to discover the type of bacteria and develop it under anaerobic environment. The second lab to take the specific anaerobic bacteria to immunize hens and deliver the tailor made Ig Y produced by hens through eggs.

It is extremely hard to conserve and transport the anaerobic bacteria so a special technique had to be invented.

Samples were sent to the lab in special recipients to avoid contact with oxygen but also in a short time as any minute counts.

After 7 working days the results came out from the first lab: patient No. 1 had a high concentration of „*Fusobacterium nucleatum*” and the specific Ig Y antibody was created for this bacteria. The actual product came as an egg powder which can be used to rinse your mouth if you mix it with water. Immunized eggs were also given to the patient to be eaten raw.



Figure 3

After 7 days of treatment the results appeared: teeth were less loose, gums stopped bleeding and were less inflamed - patient was feeling better overall.

The whole length of the treatment was 5 weeks, in the first 2 weeks patient had to take one raw egg in the morning. For the next 3 weeks pt had to take on spoon of powder mixed with water in the morning and one spoon of powder mixed with water or milk before going to bed.

For patient No. 2, bacteria found was „*Parvimonas micra*” and „*Prevotella oralis*”. Using the same procedure patient was given only the egg powder. Again, the result could be seen in only 9 days after using the treatment, signs of periodontitis were reducing: Less swelling, less bleeding, mobility reduced.

Discussion

Although the patients were feeling better, after 6 months studies had to stop due to lack of funds to continue the treatment.

The Studies above had been done in Romania, using Ig Y as a dietary supplement according to the local law.

The huge advantage of Ig Y is that it can be easily absorbed through any type of tissue having a molecular weight of 180k daltons.

**Extremely good results were achieved for severe psoriasis cases which had no cure but were treated using Ig Y but also against *Helicobacter pylori*.

Conclusion

After just one week of treatment using personalised Ig Y against the above mentioned bacteria in patients suffering from periodontitis, results were visible.

Teeth mobility reduced, gum bleeding as well an overall sign that treatment was working. Patients had to follow the same brushing routine so neither the toothpaste or toothbrush was changed or mouthwash added to their treatment. No surgical treatment was done, not even debridement or a simple scale and polish.

IG Y proves to be a real help although it has been studied too less along the years. Being able to deliver a strong antibody for a certain bacteria which has been naturally produced to fight that specific type of bacteria is a real progress in a world of unknown. Antibiotics should know that where their limit ends, Ig Y will take over and this study has proven it is possible.

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