The influence of pregnancy on the stomatological system

Liliana Sachelarie[1], Carmen Stadoleanu[2], Maricica Pavaleanu[3], Xenia Patras[4]

Iasi, Romania

Summary

***Objectives*. The purpose of this study is to establish a connection with a series of risk factors and to follow the specific methods of prophylaxis and therapeutics used in case of changes of the stomatognathic system.**
***Material and method*. Fifty pregnant women in different stages of pregnancy. For each particular case we observed the aspect of stomatognathic system during the entire period of pregnancy, by emphasizing some of the modifications that have been produced.**
***Results*. The pregnant women involved in this study presented a series of modifications, especially in the development of decays during the first and second stage of pregnancy.**
***Conclusions*. The present study succeeded to prove the existence of a specific pathology in the stomatognathic system in case of pregnant women. It could also be observed a more evident development of the entities that define the dental pathology (dental decays, dentinal hyperesthesia), the periodontal pathology (pregnancy gingivitis) or of the mixed dental-periodontal pathology.**

***Key words*: pregnancy, pregnant woman, stomatognathic system, conduct, therapeutics.**

Introduction

The physiopathological processes of the stomatognathic system are included into a biological complex of human organism and suffer modifications during pregnancy as an adaptive result of the specific hormonal complex. In this context, some of the affections due to the pregnancy have been studied and described, because of their connection to both teeth and oral mucous membrane, even if some of them have a transitory aspect.

A good co-operation between obstetrician and dentist leads to prevention and intervention made in time, avoiding some other possible complications for the mother or the fetus. The connection between pregnancy and oral decay still remains a debated pathology problem. It seems that pregnancy is not responsible for oral decay genesis. The development of oral decays is due mainly to an inadequate alimentary conduct and hygiene [1].

There are women that really believe, even nowadays, that pregnancy causes the loss of teeth or that calcium reserves from the maternal teeth are transferred by the organism to supply the fetus needs. Nevertheless, there are some other oral manifestations during pregnancy, such as: the odonto-periodontal ones (decays, increasing

[1] Lecturer, "Petre Andrei" University, Iasi, Department of Biophysics; biophysicist and dental physician;
[2] Professor, „Petre Andrei" University, Iasi, dental physician
[3] Assoc. Prof., „Petre Andrei" University, Iasi, Department of Obstetrics and Gynecology
[4] Assoc. Prof., „Petre Andrei" University, Iasi, Department of Pharmacology

dental mobility, dental erosion, dental hyperesthesia), salivary manifestation and mucous – gingivitis (pregnancy gingivitis, pregnancy epulis, etc.) [2]. This problem still remains open to further research, requiring co-operation between obstetricians and dentists.

The present study emphasizes the modifications of the stomatognathic system during pregnancy and defines the specific methods required by their prophylaxis and therapeutics [2].

Material and method

In this study we used a number of 50 pregnant women in different stages of pregnancy. For each particular case we observed the aspect of the stomatognathic system during the entire period of pregnancy, by emphasizing some of the modifications that have been produced. We tried to establish a connection with a series of risk factors and we followed the specific methods of prophylaxis and therapeutics used in case of changes of the stomatognathic system.

The pregnant women have been examined both by an obstetrician and a dentist. A medical record has been registered by observing the obstetrical aspect (age, obstetrical antecedents, age of fetus, the pathology of pregnancy) and the stomatological one (an extra and intra-oral clinical examination) [1].

The stomatological pathology, observed on the study group, had in view a series of odonto-periodontal, mucogingival and salivary manifestations.

We intended to establish a connection between the stomatological affections appeared (the dental ones and the gums aspect) and a series of factors such as the age of fetus and mothers. We also settled prophylactic and therapeutic methods used in case of oral decay, dental hyperesthesia, pregnancy gingivitis and sialorrhea [3].

Results and discussions

The pregnant women involved in the study presented a series of modifications, especially the development of decays during the first and second stage of pregnancy.

A greater development of the entities that define the dental pathology (dental decays, dentinal hyperesthesia), the periodontal pathology (pregnant gingivitis) or the mixed dental-periodontal pathology could also be observed.

All the problems that occurred have been solved by a specific treatment established by the obstetrician and the dentist [1].

Figure 1 shows the greater development of gingivo-periodontal affection in pregnant women in the third trimester of pregnancy.

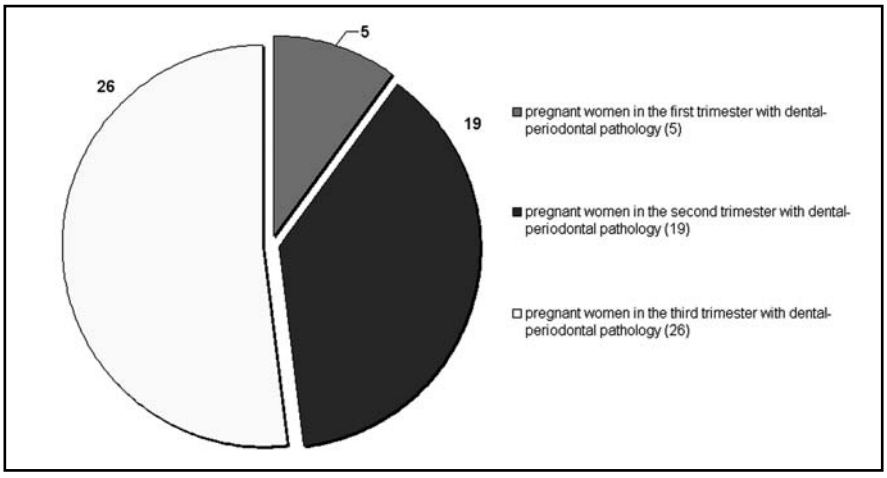

Figure 1. The distribution of pregnant women with gingivo-periodontal related to pregnancy trimesters

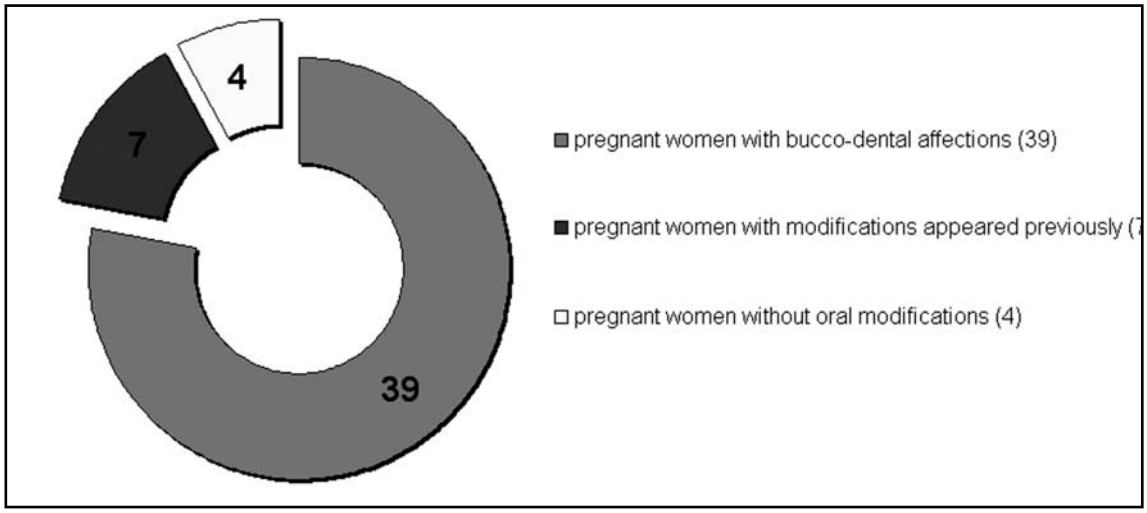

Figure 2. The distribution of pregnant women involved in the study, which presented stomatological affection

Figure 2 shows a very small percentage of pregnant women without any oral modification, as well as an average one of those presenting modifications that appeared during a previous pregnancy.

After gathering the data obtained from the 50 pregnant women presenting a gingivo-periodontal pathology, we accomplished a series of statistical processing, reproduced in *Figure 3*.

The women being over 40 years old present more gum modifications then the others.

In case of dental decay (that occurs most frequently, even if the pregnancy is not responsible for it) the prophylactic treatment imperatively required contained a rigorous oral hygiene, a proper feeding including vitamins and proteins, as well the diagnosis and proper treatment of a possible lesion from the very beginning of pregnancy. The treatment, in this specific case, is administered with the consent of the pregnant woman to be sedated (xyline 2%, max. 4 ml is used as anesthetics), the best period recommended being the second term of pregnancy.

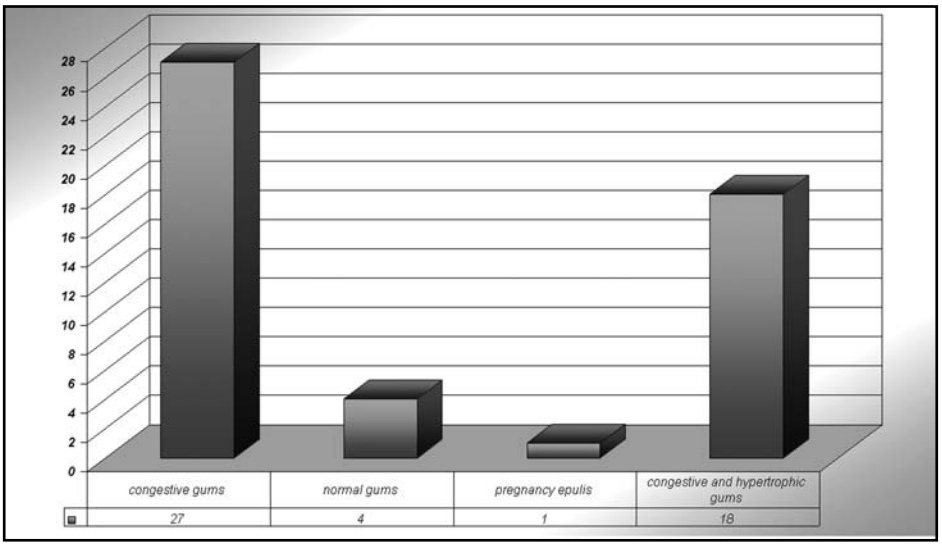

Figure 3. The aspect of gums during pregnancy in the study group

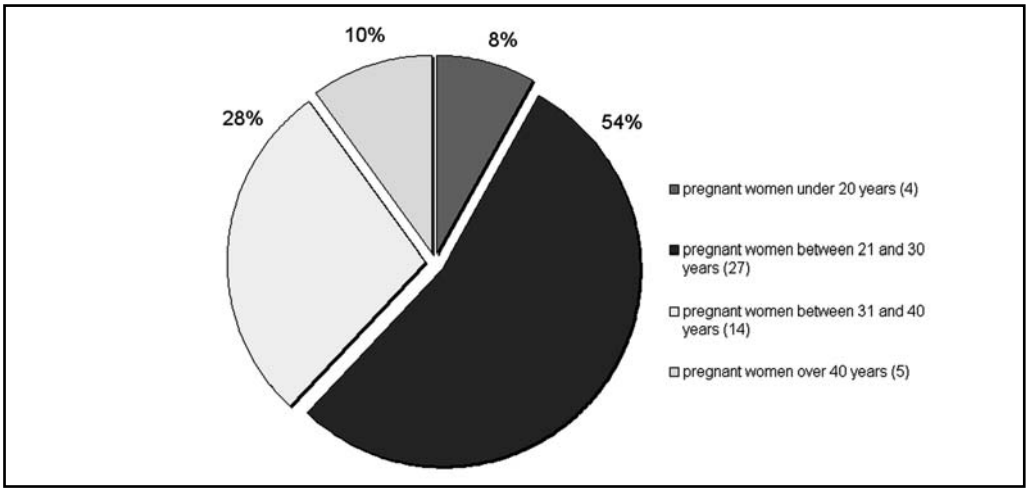

Figure 4. Distribution of gums depending on the age of pregnant women.

Dental hyperesthesia, which manifests with pains depending on the variations warm-cold or acid-hard food, can be treated by administering strong analgesics; for local treatment fluoride, anesthetics and alkaline toothpastes are recommended (all these having the previous consent of the obstetrician).

Pregnancy gingivitis prophylactic treatment comprises rigorous oral hygiene, linked to avoiding food that irritates the mucous membrane, and, before the third month of pregnancy, removing or treatment of the decisive factors is needed. The curative treatment involves the administration of A, B, K, C vitamins, the oral lavage or wadding using a diluted solution of peroxide, and in case of ulcerous gingivitis antibiotics can be used locally through oral lavage with antiseptic solution [4].

It is also necessary to have in view the sialorrhea, linked to the modification of salivary pH, which usually disappears after the third month of pregnancy; but when it continues after this month, it is necessary to evaluate certain factors that might determine it: high blood pressure, renal toxic aspects and nervous disorders.

Conclusions

The present study succeeded to prove the existence of a specific pathology in the stomatognathic system in case of pregnant women. We established a connection between the stomatological pathology and the obstetrical parameters. The co-operation between the obstetrician and the dentist is important, in order to obtain a total prophylaxis for the stomatological pathology of the pregnant women and a proper therapeutic conduct. In conclusion this co-operation really reduces the development of stomatological diseases during pregnancy (approx. 40%).

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Correspondence to: Dr. Liliana Sachelarie, Octav Botez 5, Iasi, Romania. E-mail: lisachero@yahoo.com