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Hypercomplementemia among Peridontal Disease Patients: Gengivitis

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Abstract

Fifty gingivitis patients were diagnosis by dentist. The age range were 20 -49 years.Blood and saliva samples were collected from the test patients and ten apparently normal subjects as a control. Serum, whole and salivary proteins were subjected to C3 and C4 determinations. C3 and C4 concentration means of patients were higher than that for normal subject control. They approximate tow folds than that of control. Male approximate female patients levels of C3. Five combined C3 and C4 Hypercomplementemia out of 50 in both of the sexs. Six C4 and two C3 hyper complementemia were noted as single expression. Such hyper complementemia is of secondary type To infection and/ or inflammation responses of the gum.

Index terms— gingivitis, hypercomplementemia, saliva, serum, gum.

1 Introduction

omplement system serves both of natural and adaptive immune responses, since properdin pathway serves in natural and classical pathway is operable in adaptive responses (1,2,3). The actual levels of complement components are different in different health state of vertebrate including man (4). From the diagnostic point of view there are three complement component concentration levels. The normocomplementemia, hypo and hyper complementemia (5,6) which corresponds to health, difficient and excess of complement concentration levels respectively. Among the Disease conditions that are associated with hyper complementemia is in infectious disease (7,8). The aim of the present work was to determine complement C3, C4 levels in both serum and saliva of the gingivitis patients.

2 II.

Material And Methods a) Patients (**??**) and controls Fifty gingivitis patient from both males and females were clinical diagnosed by the specialized dentists (9) Ten apparently normal mouth hygeine subjects were elected as control .

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3 c) Sliva and Salivary Proteins

From both gingivitis patients and controls saliva were collected as recommended by salimeteres (10). Salivary protein was separated using 6% .polyethyleneglycol 6000 as protein precipitant (11) d) Single Radial Immunodiffusion Partigen diffusion plates containing anti C3 and anti C4 ready made, were used for determination of

C3 and C4 both is in sera and saliva and salivary proteins (12) e) Biometery Mean, median, range as well a, standard errors were calculate as Steel et al (**??**3) III.

4 Results

5 a) Serum and Salivary C3

The C3 concentration means for gingivitis patients were higher than that of controls. Male and female patients were showing an approximate concentration mean levels. There were individual and age group wise variations noted among the gengivitis patients C3 concentration means Figure-1. There was one peak graph, such graph can be useful as a probe for human herd immunity among gingivitis patients. In comparison saliva, salivary proteins were negative for C3 of the patients and controls. Table 2,5 figure 1.

6 b) C4 serum and salivary concentrations

The C4 concentration means for patients and controls were determined. They higher in patients them in controls. Though saliva and salivary proteins were negative for presence of C4. Table 3 ,6,figure **??**.

7 c) C3 and c4 serum hypercomplementemia

There were two male And there female gingivitis patients will combinedC3, C4 hyper complementemia. Two female patients with C3 hypercomplementemis and six C4 Hpercomplementemia in single expression from both sex Table 4. ———————————————————————- Age group numbers ——— ————————————-

8 Discussion

Due to tissue micro-environmental signals the c3 and c4 synthesizing and secreting cells will either enhanced to produce or down regulated to inhibit the catabolic and to anabolic synthesis pathways for both c3 and c4 to meals the tissue immune physiological need for complement proteins (18) Thus, on conclusion one may sum up the findings as 1. C3, c4 concentration means are elevated in gingivitis patients in the systemic but not in mucosal compartment. 2. Single c3, single c4 and c3 -c4 combined hype ramp lenentcmi were reported in gingivitis patients. 3. Serum c3, c4 concentration means were of comparable levels in both of male and female patients. 4. C3 levels among gingivitis patients may be of use as a probe for gingivitis human herd immunity.

9 F

The C3 and C4 concentration means were determined Tables 1-4, Figure l. Patients were showing higher C3, C4 concentration mean than controls. Male and enhance female were with comparable concentration means. Saliva and salivary proteins were negative for both c3 and c4 .c3 concentration means can be of use as a probe for gingivitis human herd immunity

The antigens of the dental microbial pathogen on chronic low grade state facing the stomial mucosal immune compartment may leads to stimulation of c3,c4 in serum concentration reaching the limits of secondary hyper-compelementimeia (14,15) . Thus, it may cause the formation of immune complex formation and deposition in the soft gum and periodontal tissues leading to nalifying c3 , c4 in concentration in saliva (16) this nullification may influence the initiation of the activation of classical complement pathway, since c3 and c4 inter played a crucial role in such activation process (17,18,19,20) [1]

12

Figure 1: Figure 1 :Figure 2 :

1

Figure 2: Table 1 :

2

Figure 3: Table 2 :

3

??	Gender NO ??????????????????????????
Female	26
Total	50

Figure 4: Table 3 :

4

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Figure 5: Table 4 :

5

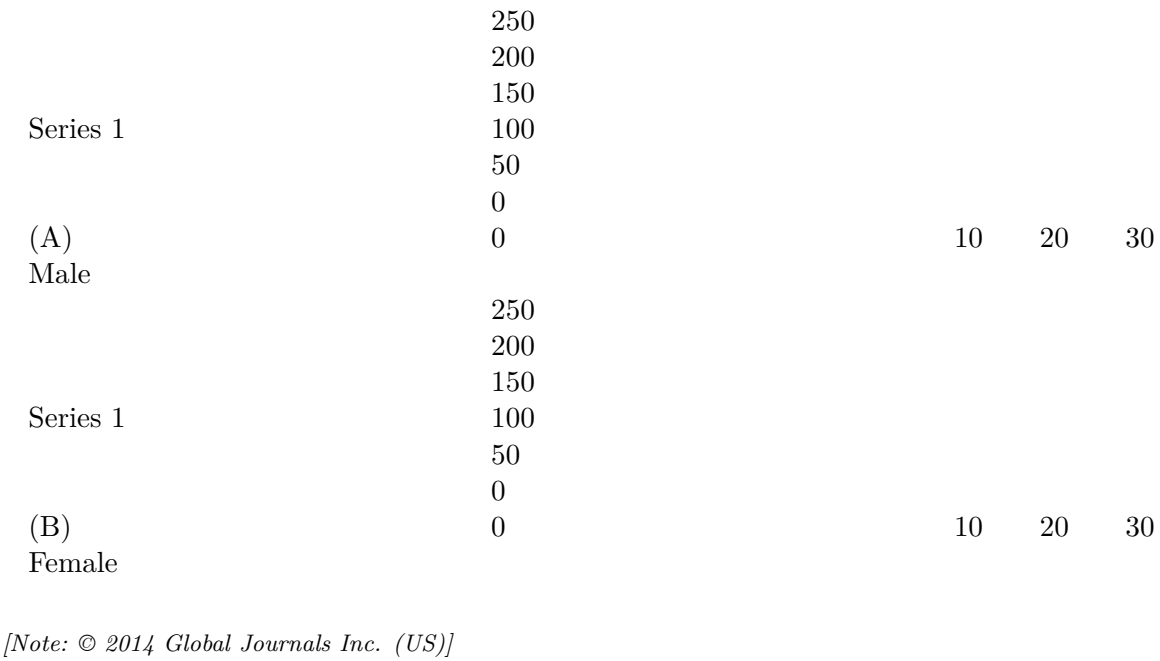

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Figure 6: Table 5 :

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