# Parotidite

Maria Vendemmia<sup>\*</sup>, Gjeorgjina Kuli Lito<sup>\*\*</sup>, Carlo Liguori<sup>\*\*\*</sup>, Enkeleda Kadiu<sup>\*\*\*\*</sup>, Salvatore Vendemmia<sup>°</sup>

\* NICU University of Naples Federico II

\*\* Professor of Pediatrics University of Tirana, Albania

\*\*\* Radiologist, Chief of Radiology Unit, San Giovanni Bosco Hospital, ASL NApoli1, Napoli

\*\*\*\* Pediatrician Tirana, Albania

<sup>°</sup> Chief Department of Pediatrics. Founder, President and Emeritus President of SIPO and GNNNP, President Italian Arabic Pediatric Society (IAPS), President Italian Romanian Pediatric Society (IRPS), President Albanian Italian Pediatric Society (AIPS), Italian Delegate UMEMPS

# INTRODUCTION

There are many diseases affecting the salivary glands. They are not very frequent and not easily recognized and timely diagnosed. Therefore we list the most frequent ones: ranula, salivary stones, neoplasms, fistulas, scialoadenitis.

# DESCRIPTION

RANULA: it is a cystic formation with a serum-mucous content, located in the sublingual region and intimately connected with the salivary gland. The most frequently encountered form is the sublingual ranula which is intimately connected with the salivary gland. Sublingual ranulae are found most frequently; more rare are subioid ranulae and generally they are extensions of the sublinguals.

SALIVARY GLAND STONES: Scialolithiasis is represented by numerous concretions, consisting mainly of calcium salts and, to a lesser extent, of organic substances. Such concretions are found inside the ducts or in the parenchyma of the salivaries. It is not a very frequent pathology and, in most of cases, stones are present in Wharton's duct and submaxillary, much less in the parotid and Stenone's duct.

SCIALOADENITES: The most severe form of this group is acute suppurative mumps which is caused by staphylococcus aureus, usually represented by coagulase-positive strains and therefore more resistant to antibiotics. It affects rarely children, more frequently adults and the elderly.

PAROTIDYDE: This form is more common in pediatric age. It is an unilateral affection, insidious and belatedly recognized.

EPIDEMIC PAROTITIS: is a viral disease caused by paramyxovirus, it is not sporadically and affects communities of healthy subjects of all pediatric ages, even nonimmune adults. It does not tend to suppurate. Generally such disease is bilateral, the parotids are markedly enlarged, so much so that the ear pinnae are displaced outward. The outer skin is slightly edematous, reddened and painful. Chewing is painful and, in the mouth, Stenone's duct has its end reddened and edematous.

NEOPLASES OF THE SALIVARIAN GLAVES: such neoplasms are represented, mainly by mixed tumors, epithelial neoplasms arising from the same matrix as the salivary parenchyma. These neoformations (salivary adenolymphoma and parotid lymphocytoma) are generally benign in character, differ in clinical evolution and histologic picture, from carcinomas of salivary origin. Salivary carcinomas: they are represented by cylindroma, adenocarcinoma, squamous cell carcinoma, undifferentiated carcinoma.

# CLINICAL CASE

Male subject, 6 years old in apparent good health, vaccinated for mumps. Since about three days onset of considerable swelling of the right parotid gland, with protusion of the lower parotid pole from the mandibular angle (Fig. 1, 2). The skin overlying the lesion is slightly reddened, edematous and very painful on palpation. The oral outlet of the right parotid duct is reddened and there is no muco-purulent exudate. Chewing is painful. Explorable lymphonodes, especially in the submaxillary region, are enlarged and painful on pressure. Modest rise in body temperature. On the basis of these findings and according to the anamnestic history a diagnosis of parotiditis was done. Ultrasound examination, and especially laboratory tests, confirmed the diagnosis. It should be noted that salivary amylase was very high (221.0 Ul) while pancreatic amylase was very low (17.0 Ul). VES, leukocytes and neutrophils were elevated (Fig. 3, 4). Appropriate antibiotic therapy resolved the problem in a few days.

# DISCUSSION

Our baby was immune to epidemic mumps, therefore this could not be the diagnosis. However, the differential diagnosis with epidemic mumps was easy, because it is a bilateral epidemic manifestation, doesn't appear spontaneously or tends to suppuration.

In truth it might have been easier to confuse this form of acute bacterial parotitis with submaxillary or parotid adenophlegmons because, in these regions, there are very intimate relations between the lymphoganglia and the salivary glands (Fig. 5, 6). Penetration of pyogenic bacteria into the lymphatic network results in their initial arrest in the lymphoglandular stations with subsequent passage into the salivaries. Involvement of the lymphonodes is evident, as in our case, by ultrasonographic examination that also documents the involvement of the lymphoghiandular stations (Fig. 7).



#### ESAME EMOCROMOCITOMETRICO

| Metodo: Citofluorimetrico | (Advia 2120) |
|---------------------------|--------------|
|---------------------------|--------------|

| 5,22   | xMilione/uL   | 3,80 - 5,40   |
|--------|---|---|
| 12,8   | g/dL  | 10,0 - 16,0   |
| 39,7   | %   | 30,0 - 50,0   |
| 76,1   | fL  | 70,0 - 100,0  |
| 24,5   | pg  | 23,0 - 35,0   |
| 32,2   | g/dL  | 30,0 - 36,2   |
| 12,7   | %   | 11,0 - 17,0   |
| 2,59   | g/dL  | 2,20 - 3,20   |
| 537 *  | x1000/uL  | 150 - 500   |
| 0,33   | %   | 0,10 - 0,70   |
| 6,5    | fL  | 6,5 - 14,0  |
| 11,97  | x1000/uL  | 4,00 - 15,00  |
| 68,8 * | %   | 25,0 - 45,0   |
| 21,2 * | %   | 30,0 - 70,0   |
| 5,3    | %   | 0,0 - 11,0  |
| 3,1    | %   | 0,0 - 7,0   |
| 0,3    | %   | 0,0 - 2,0   |
| 1,3    | %   | 0,0 - 5,0   |
| 8,2 *  | x1000/uL  | 1,5 - 6,9   |
| 2,5    | x1000/uL  | 0,6 - 6,3   |
| 0,6    | x1000/uL  | 0,0 - 0,9   |
| 0,4    | x1000/uL  | 0,0 - 0,7   |
| 0,0    | x1000/uL  | 0,0 - 0,2   |
| 0,2    | x1000/uL  | 0,0 - 0,5   |
|        | 5,22<br>12,8<br>39,7<br>76,1<br>24,5<br>32,2<br>12,7<br>2,59<br>537 *<br>0,33<br>6,5<br>11,97<br>68,8 *<br>21,2 *<br>5,3<br>3,1<br>0,3<br>1,3<br>8,2 *<br>2,5<br>0,6<br>0,4<br>0,0<br>0,2 | 5,22xMilione/uL $12,8$ g/dL $39,7$ % $76,1$ fL $24,5$ pg $32,2$ g/dL $12,7$ % $2,59$ g/dL $537$ *x1000/uL $0,33$ % $6,5$ fL $11,97$ x1000/uL $68,8$ *% $21,2$ *% $5,3$ % $3,1$ % $0,3$ % $1,3$ % $8,2$ *x1000/uL $2,5$ x1000/uL $0,6$ x1000/uL $0,4$ x1000/uL $0,0$ x1000/uL $0,2$ x1000/uL |

Fig. 3

| AMILASEMIA TOTALE<br>Metodo: Enzimatico colorimetrico | 238 *           | U/I        | Fino a 100        |
|---|-----------------|------------|-------------------|
| LIPASEMIA<br>Metodo: Cinetico colorimetrico           | 24              | U/I        | 13 - 60           |
| ISOENZIMI AMILASI<br>Metodo: Enzimatico colorimetrico |                 |            |                   |
| Amilasi pancreatica<br>Amilasi salivare               | 17,0<br>221,0 * | U/I<br>U/I | 8 - 53<br>15 - 88 |
| V.E.S.<br>Metodo: Fotometria                          | 31 *            | ml/h       | Fino a 15         |

Fig. 4









Fig. 7

# CONCLUSIONS

We reported this case for its deceptive onset and subtle differential diagnostics.

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