

# THIRD MOLARS CLASSIFICATIONS PREVALENCE IN THE CITIES OF CUNHA PORÃ, MARAVILHA AND PALMITOS IN THE NORTHWEST OF SANTA CATARINA STATE IN BRAZIL

*PREVALÊNCIA DAS POSIÇÕES DE TERCEIROS MOLARES NOS MUNICÍPIOS DE CUNHA PORÃ, MARAVILHA E PALMITOS, NO EXTREMO OESTE DE SANTA CATARINA*

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## SUMMARY

*The present work considers an analysis of the prevalence of the classification of third molar ones, in the cities of Wedge Porã, Maravilha and Palmitos, in the Extreme West of Santa Catarina, Brazil. The third molar uppers and lowers had followed themselves for the classifications already proposals for some authors. 585 orthopantomographics had been examined, 210 of patients of masculine sort and, 375 of patients of the feminine sort. A total of 1815 third molar ones was verified, with tooth 18 (450), tooth 28 (465), tooth 38 (453) e, tooth 48 (447). The patients had varied in an eatery band of 15-39 years, having been the biggest prevalence of 390 patients with age of 15-20 years. Bigger prevalence for the uppers third molar in the vertical, distal and medial positions was gotten respectively. For the lowers third molar the vertical positions, medial and, horizontal line respectively, together with Class I C.*

**UNITERMS:** *third lowers impacted molars, third upper impacted molars, impacted teeth.*

## RESUMO

O presente trabalho propõe uma análise da prevalência da classificação de terceiros molares, nos municípios de Cunha Porã, Maravilha e Palmitos, no Extremo Oeste de Santa Catarina. Seguiram-se para os terceiros molares superiores e inferiores as classificações já propostas por alguns autores. Foram examinadas 585 ortopantomografias, 210 de pacientes do gênero masculino e, 375 de pacientes do gênero feminino. Um total de 1815 terceiros molares foi verificado, com o dente 18 (450), dente 28 (465), dente 38 (453) e, dente 48 (447). Os pacientes variaram numa faixa etária de 15-39 anos, sendo a maior prevalência de 390 pacientes com idade de 15-20 anos. Obteve-se maior prevalência para os terceiros molares superiores nas posições vertical, distal e medial respectivamente. Para os terceiros molares inferiores as posições vertical, medial e horizontal respectivamente, com a Classe I C.

**UNITERMOS:** terceiros molares inferiores retidos; terceiros molares superiores retidos; dentes retidos.

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## INTRODUCTION

The impacted tooth prevalence and frequency are subject that worries the majority of the authors since a lot time, all want to know which factor are that one that more has to have with this type of pathology in the buccal socket<sup>01,02,04-07,09-11,14,21,22,24,25,27-29</sup>. Special prominence always is for account of the prevalence each bigger time of the lowers and uppers third molar<sup>01,02,04,05,06,07,09-11,13,14,24,25,27-29</sup>. The retained tooth's reveal very frequent, also, however for few researchers<sup>01,28</sup>. The agenesis of the third molar inferiors, superiors, tooth's and other teeth, also, very is detached by literature<sup>10,11,17,19,26</sup>.

The third molar one has been the argued tooth more in odontologic literature and the great question on extracting it or it wont not have to take each time more the professionals of the area to argue this so controversial maneuver, to plan and to study this subject, of the highest importance for all specialties. Although nor all the third molar ones cause clinical and even though pathological problems, each one of them has a great potential being able to be periodontal associates with the pericoronarits, illnesses, molar carious, reabsorptions of the second adjacent ones as, also, with the formation of cysts and tumors<sup>10,13,15,16</sup>.

The dental surgeon normally possess many difficulties in taking the decision to extract or not them third molar asymptomatic, retained or not, as well as its prophylactic removal, that comes being widely debated in literature<sup>15</sup>. With the advent of the modern orthodontics, each time is more discussed on the permanence or not of the third molar ones. Authors who defend the extraction of all the third molar burningly restrained ones or not, without which can be found do not consider concluded the orthodontic treatment<sup>10</sup>. On the other hand more the conservatives believe that being kept, could many anchorage dues times be a very useful element in orthodontic, prosthetic support, or even though in the substitution of dental elements as in the transplants<sup>10,15</sup>.

The bucomaxillofacial surgery and traumatology that each time for aesthetic procedures and corrections of deformity walks more I teethe face, as the popularizes of the ortognatic surgery, is leaving, many times of side, the buccal surgeries that could be until less complex. The surgeons forget themselves that the daily procedures in the clinic are these and that, in the United States are only expenses annually, more than half billion of dollar with restrained tooth surgeries.

The main objective of this research was that one to make a radiographic survey, using orthopantomographics x-rays for the establishment of the prevalence of the classification of third molar inferiors and superiors in a region of the Northwest of Santa Catarina, Brazil, comparing the results gotten with those finding in literature.

Through the traditional classifications<sup>20,30</sup>, beyond modified<sup>10,11,12</sup>, it was looked to know of the prevalence of third molar inferiors and superiors in the particular clinic of the author in the cities of Wedge situated Porá, Maravilha and Palmitos in the Northwest of Santa Catarina, Brazil. It will be observed with this if this prevalence suffers some type of influence with relation to the age, sort beyond ethnic groups.

In the present study the classifications for lowers and uppers third molar<sup>20,30</sup> with modifications had been adopted<sup>10,11,12</sup>. The classification of Winter<sup>30</sup> (1926) modified<sup>10,11,12</sup> for the third molar inferiors is the following one (Figure 1 and 2):

1. *Vertical position*, when the long axle of the third molar inferior will be the parallel to the long axle of as molar inferior.
2. *Medial position*, when the long axle of the third molar inferior will be in medial position, related with as the molar inferior.
3. *Distal position*, when the long axle of the third molar inferior will be in distal position to the one of as the molar inferior.
4. *Labial position*, when the long axle of the third molar inferior will be in labial position, or initial to the one of as the molar inferior.
5. *Lingual position*, when the long axle of the third molar inferior will be in lingual position to the one of as the molar inferior.
6. *Horizontal position*, when the long axle of the third molar inferior will be the perpendicular to the one of as molar inferior.
7. *Inverted position*, when the crown of the third molar inferior will be in opposite position to the one of as the molar inferior.

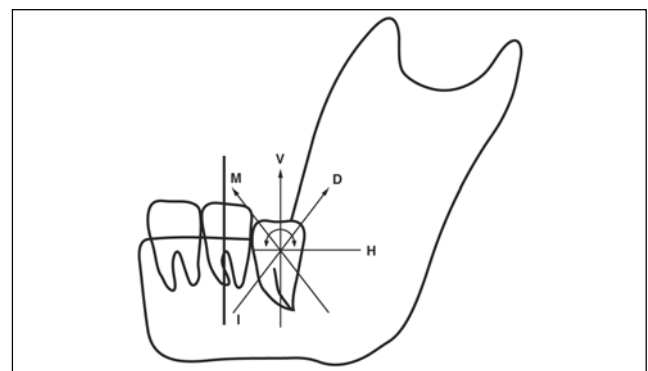


Figure 1 – Classification proposal for Winter<sup>30</sup> (1926), modified<sup>10,11,12</sup>.

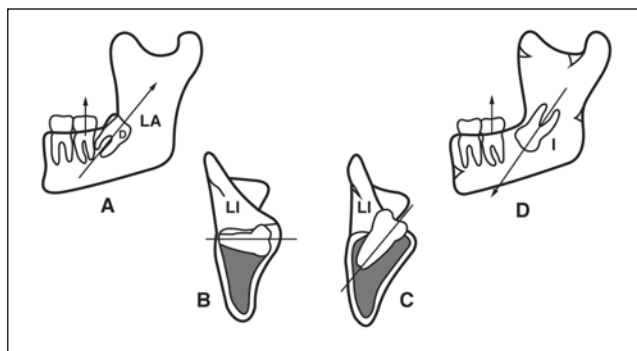


Figure 2 – Labial position (A), lingual (B and C) and invert (D), of retention of third molar inferiors Winter<sup>30</sup> (1926), modified<sup>10,11,12</sup>.

The Pell and Gregory<sup>20</sup> (1933) classification relates the inferior third molar with the previous edge of the mandible branch, beyond its depth in the dental arc (Figure 3): 1. *Relation of the third molar restrained inferior with the previous edge of the mandible branch, being able to be:* 1.1 *Class I*, when it has enough space between the previous edge of the jaw and the distal face of the molar inferior, to accommodate the crown of the third molar inferior. 1.2 *Class II*, when the existing space between the previous edge of the mandible branch and the distal face of the molar inferior is lesser of whom the mesial-distal diameter of the crown of the third molar inferior. 1.3 *Class III*, when the third molar inferior meets total in the mandible branch for the total lack of space in the alveolar arc. 2. *Relative depth of the third molar inferior in the mandible bone. This depth becomes to be related with the highest portion of the occlusal face of the inferior third molar with the occlusal face of the molar inferior:* 2.1 *Position A*, when the highest portion of the occlusal face of the third molar inferior meets it the same level or above of the occlusal face of as the molar inferior. 2.2 *Position B*, when the highest portion of the occlusal face of the third molar inferior meets of the occlusal line of the molar inferior, but above of cervical of this exactly the tooth. 2.3 *Position C*, when the highest portion of the occlusal face of the third molar inferior meets it the same level or below of the cervical line of as the molar inferior.

For the upper third molar, the classification of Winter<sup>30</sup> (1926) modified<sup>10,11,12</sup> noticing itself (Figure 4): 1. *Vertical position*, when the axle of the third molar superior meets the parallel to the one of as molar superior. 2. *Medial position*, when the long axle of the third molar superior is directed for the medial one in relation to as the molar one.

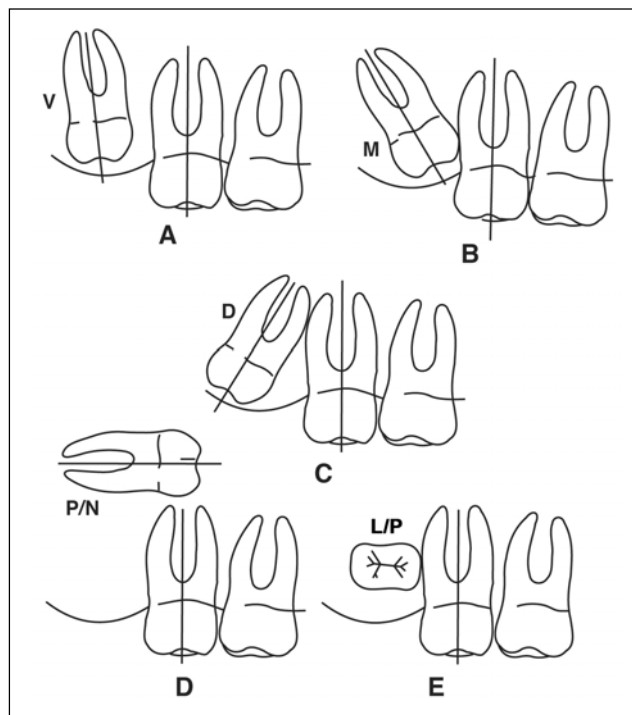


Figure 3 – Classification of impacted upper third molar in accordance with Winter<sup>30</sup> (1926): vertical position (A), medial (B), distal (C), paranasal (D), for labial or lingual (E)<sup>30</sup>.

3. *Horizontal position*, when the long axle of the third molar superior is perpendicular to the one of as the molar one. 4. *Labial and lingual position*, as the long axle meets directed for labial or lingual. 5. *Distal position*, when the long axle of the third molar superior is directed for distal in relation to the one of as the molar one. 6. *Paranasal position*, those are called when the third molar superior has other positions that aren't fit in this classification.

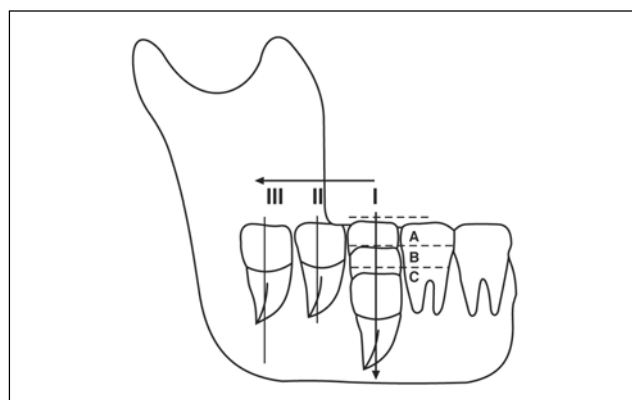


Figure 4 – Classification of Pell and Gregory<sup>20</sup> (1933) for third molar impacted inferiors, in accordance with the depth in dental arc e, if has or space not to accommodate it<sup>10</sup>.

The study of the molar classification and frequency of third impacted ones or not, little interest in the current researchers has motive, for the fact of this subject already to perhaps have been widely searched in a past not very distant, thus desmotivated, new inquiries<sup>37</sup>. However one becomes to be necessary to revise if those results found in the past can still be surpassed for the present, with all its magnificence.

## 1 Studies on the positions of lowers third molar retained

In a study carried through with a thousand (1.000) patient ones in Brazil, it was found here that the position most frequent of third molar retained inferiors was the medial one with a 58% frequency<sup>10</sup>.

In India this study carried through with five hundred and twenty and five (525) retained teeth, it was observed that the third molar inferiors met more frequent in the medial position, independent of the masculine or feminine sort<sup>10</sup>.

In Ribeirão Preto, SP, Brazil in the Clinic of the Dentistry College of the USP, a study with a thousand (1.000) patient ones was effected, on the percentage of third molar impacted inferiors<sup>21</sup>. They had been gotten as more frequent positions, the vertical line with 44%, the horizontal line with 29,4% e, the medial one with 26,5%. Similar results had been found four years later in the same Clinic in Ribeirão Preto (SP, Brazil)<sup>24</sup>. Same no year observed that the position most frequent of third molar restrained inferiors was classroom II and the position A, beyond vertical<sup>10</sup>.

In a study carried through with a thousand seven hundred and sixty (1760) patient ones the position of the third molar impacted inferiors was observed, noticing it medial position with the most frequent 53,2% as, followed for the vertical line with 21,4% and, the horizontal line with 21,2%. The white race in the medial position was that most frequent one with 55,9%<sup>10,11,12</sup>.

It was illustrated in a study that the most common position in third molar inferiors was the medial one with 42,25%<sup>07</sup>. In the same way that in another research where it was noticed that, also, the position most frequent was the medial one with 42,01%, followed of the vertical line with 40,78%<sup>10</sup>. Opposing these works it was evidenced to be the vertical position with 34,56% the that most frequent one for the third molar inferiors, followed of the medial one with 32,36% e, the horizontal line with 25%<sup>29</sup>.

In research carried through with ninety and three (93) pupils of the Dentistry College of Alfenas (MG, Brazil) they had together gotten for the third molar inferiors the medial position with 60% with position B as the those most frequent ones<sup>08</sup>.

Work developed in patients of the dentistry unit of hospital of the Armed Forces, concluded that in one hundred and eighteen (118) patient ones examined, forty and four (44) patients of masculine sort e had gotten themselves, seventy and four (74) patients of the feminine sort. One hundred and seventy and eight (178) retentions of third molar inferiors, being the biggest prevalence in the feminine sort. The most common position had been the medial one with sixty and three percent (63%), the vertical line with twenty percent (20%) and, the horizontal line with twelve percent (12%)<sup>09</sup>.

In studies on lowers third molar in Sweden, one met as the horizontal position with 41% e, the vertical line with 20% more frequent<sup>10</sup>.

Research carried through in patients of particular clinic in Bauru, SP, Brazil in the year of 1990, evidenced that the most common position for lowers third molar impacted or half-impacted was the medial one, followed of the vertical line, horizontal line, as also classroom II and position B<sup>14</sup>. The author still cites the medial position, together with the class type II and position B, as that more frequently found<sup>14,15</sup>.

The molar positions most frequent of third impacted on the basis of periapicals and panoramic x-rays had been evaluated and, despite the sampling being small, had evaluated two hundred and nine (209) teeth and, had concluded that the angulations most frequent was the medial one and, that the most common positions had been class type II and B<sup>10</sup>.

In study carried through with six hundred and thirty and eight (638) patient ones, with four hundred and twenty (420) of feminine sort and, two hundred and eighteen (218) of the masculine sort. The age of the patients varied of ten the seventy and three (10-73) years. In the x-rays five hundred and seven (507) lowers third molar, being situated two hundred and sixty (260) of right side and two hundred and forty and seven (247) of the left side could have been evaluated. The medial one, class type II B with 22% had gotten as more frequent position<sup>05</sup>.

Research developed in the Clinic of Surgery of the Dentistry College of Bauru – USP in the period of 1992-1997, studying eight hundred (800) burst inferior teeth does not conclude that when the age of the patients is not considered, the most frequent

position of the lowers third molar is not the vertical line. The most frequent position of lowers third molar in the medial position is bigger in younger patients, diminishing to the measure that the age of the patients increases. The frequency of the too much positions of the third molar burst lowers does not get excited with the age<sup>25</sup>.

Studying it incidence of third molar restrained ones in relation to the position of Winter, was after gotten to evaluate four hundred and fifty (450) orthopantomografics, a thousand the three hundred and fifty and eight (1358) third molar of both sorts. With the age varying of twenty and one the twenty and five (21-25) years, the vertical position with 45% was that most frequent one<sup>27</sup>.

## 2 Studies on the positions of upper third molar impacted

For the uppers third molar one noticed that the position more frequently found was the distal with 75,5%<sup>04</sup>.

In India examining five hundred and twenty and five (525) impacted teeth evidenced that the uppers third molar met more frequently in the vertical position, followed of the medial and distal positions<sup>10</sup>.

The position was found vertical as being most frequent in study carried through in Sweden<sup>10</sup>.

In one it searches with uppers third molar, where patient ones had been examined a thousand seven hundred and sixty (1760), the medial position with 39,9% was found as being the that most frequent one, followed of the vertical line with 36% and, the distal with 23,3%, being bigger the predominance in the masculine sort. With relation to the race they had observed that in the yellow race that the medial position with 42,5% was the preponderant one<sup>11,12</sup>.

For some authors<sup>40</sup> the vertical position is much more frequent with 68,32%, the distal with 17,05% and, the medial one with 13,37%. This, opposing studies<sup>08</sup> where they had observed to be the distal position with 58,45% that most frequent one. Works still meet where if they tell atypical cases of uppers third molar impacted in inverted position<sup>10</sup>.

In a study on the removal or of impacted teeth, it was not evidenced that the prevalence of third molar retained ones was studied more intensely in the fifties, with samples of groups of students in Scandinavia and Greece. In those places indices of dental impaction in the band of 17,5% and 25% had been found respectively<sup>23</sup>.

When being analyzed studies of twelve years of accompaniment with third molar impacted ones, one concluded that 22% of partial eruption and eruption of third molar ones had not been found and, that the inclination degree would be a significant factor to determine if the third molar one would make its eruption or not. Still that the time of eruption of the third molar ones greatly varied between the individuals and the studied populations<sup>10</sup>.

Studying the molar prevalence of cysts and next tumors the third impacted ones, were observed in ten years of study, nine a thousand nine hundred and ninety and four (9.994) third molar ones that they had been removed of seven a thousand five hundred and eighty and two (7.582) patient ones. They had been observed in these patients two hundred and thirty and one (231) cysts (2,31%) and, seventy and nine (79) tumors (0,79%), being the molar prevalence of cysts and tumors around of third retained ones in the 3,10% order<sup>10</sup>.

The third molar one for being the last tooth to eruption is very susceptible to become impacted, noticing great rates of dental impactions in industrialized countries of the Europe and North America in comparison with low rates of impactions in less industrialized countries. For countries industrialized these indices they can vary of 9,5% and 25%<sup>18</sup>.

Research comparing third molar ones in agricultural and urban areas southwestern of the Nigeria observed that patient ones had been examined two a thousand and four hundred (2.4000) (1,200 of urban area and 1,200 of the agricultural area), with bigger age or equal it has twenty years, through clinical comments and of periapicals x-rays. More impaction in the urban area in comparison with the agricultural one had gotten a rate of seven times. The age of impaction in the urban zone was changeable while that in agricultural zone 86,5% had between 20 and 25 years<sup>18</sup>. In relation to the angulations for inferiors impacted third molar 49% of the urban zone they had been medial, in a similar way that 54% it had been in the agricultural zone. For the uppers impacted third molar the vertical position was most frequent in the urban zone with 68,6% and the agricultural zone with 62,5%<sup>18</sup>.

Study carried through on the prevalence of third molar impacted ones in patients ortodontically treated with and without extractions to the four daily pay-molar ones, one concluded that it significantly diminished the impaction of third molar in patients dealt with extractions to the four daily pay-molar ones<sup>10</sup>.

The importance of this work is reflected in literature with works of high level, showing that this prevalence is and, will be always reason of great previsibility for the authors. It is justified, for its lack in Brazilian literature with this type of material, mainly for the region where it was affected.

**MATERIAL AND METHODS**

Five hundred and eighty and five (585) orthopantomographics x-rays had been examined, of the particular clinics of the author, situated in the cities of Wedge Porã, Maravilha and Palmitos in the Northwest of Santa Catarina, Brazil. Sampling of a thousand eight hundred and fifteen (1815) third molar ones in the eatery band of 15-39 years, the sorts masculine and feminine, being the commanded teeth in accordance with classifica-

tions (Winter<sup>30</sup>, 1926; Pell and Gregory<sup>20,21</sup>, 1933) and (Marzola<sup>11,12</sup>, 1968).

For the gauging of the classification of impacted teeth three dental surgeons had been used, being two of them general physicians and, a student of the course of Bucal and Maxillofacial Surgery and Traumatology of the regional APCD of Bauru, SP, Brazil. Before initiating the study it had a process of calibration of the examiners and, for the compilation of the results a form especially confectioned was used. The gotten results had been transformed into rates of percentage for better comparison with effective literature.

**RESULTS**

The gotten results can be express in following tables and figures:

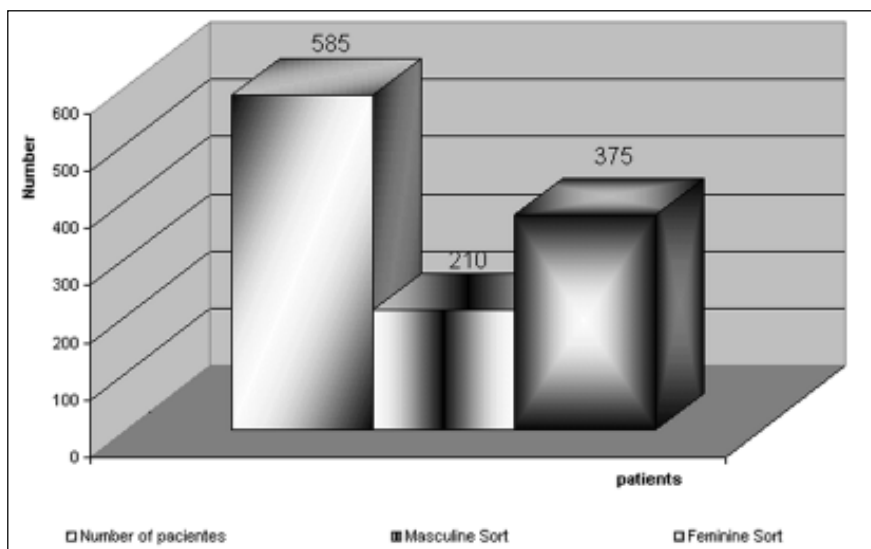


Figure 5 – Result of the number of examined patients.

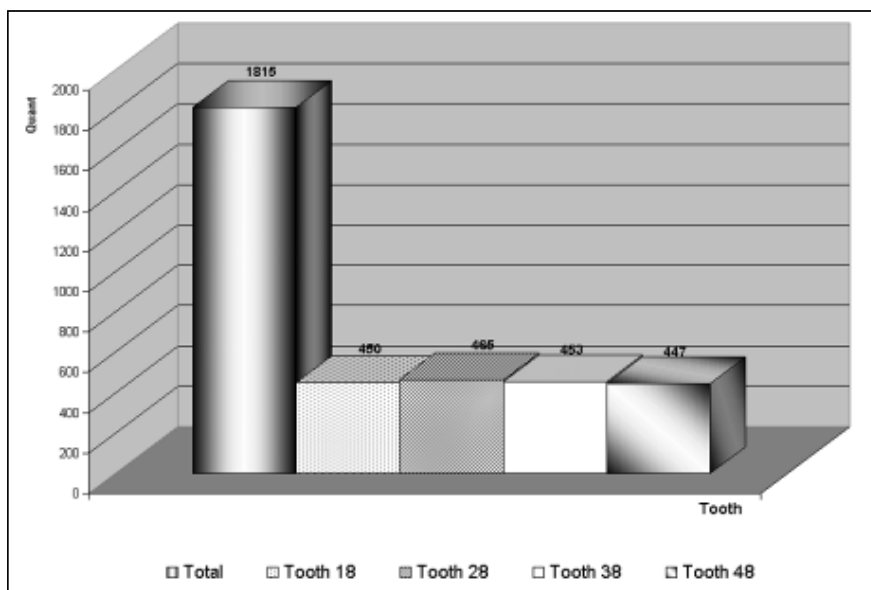


Figure 6 – Result how much to the tooth number.

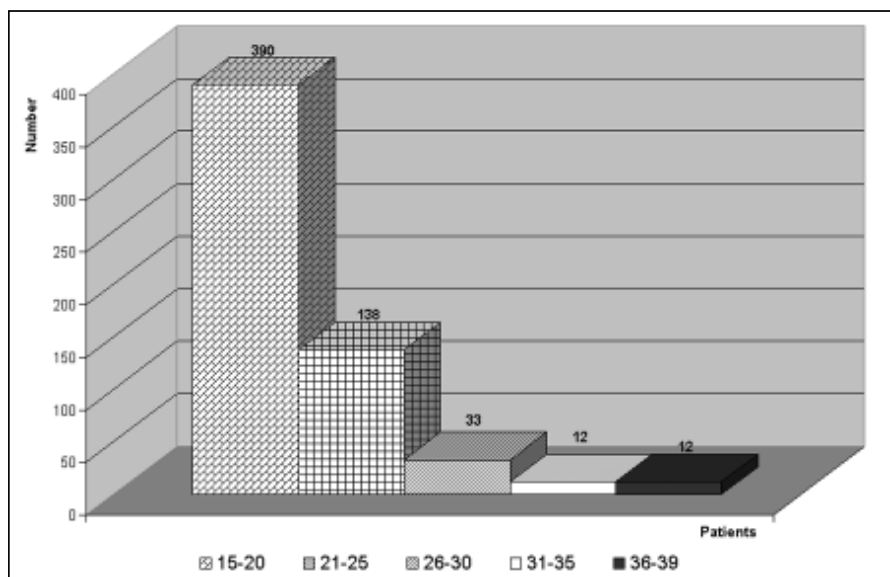


Figure 7 – Result how much to the age of the examined patients.

TABLE 1 – How much to the positions of the Uppers Right Third Molar<sup>18</sup>.

Position	Number of Tooth	Percentual (%)
Vertical	282	62,66
Medial	54	12
Distal	115	25,33
Total	450	99,99

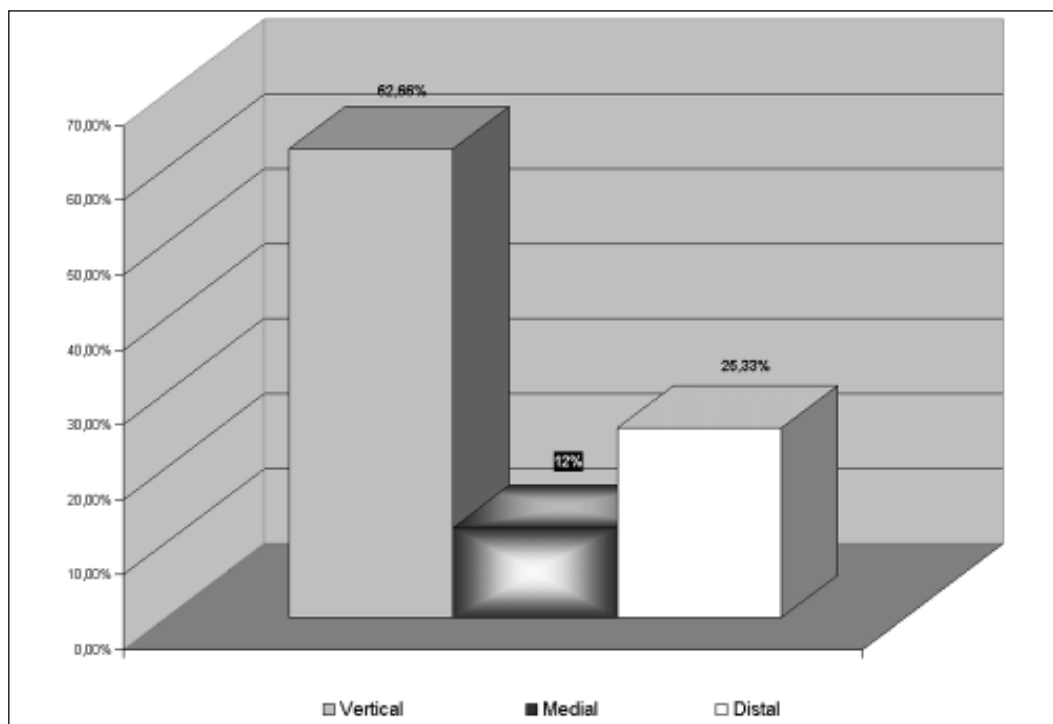


Figure 8 – Result how much to the positions of the Uppers Right Third Molar (18). It analyzes for the classification of Winter<sup>30</sup> (1926) modified<sup>10,11,12</sup>.

TABLE 2 – How much to the positions of the Uppers Left Third Molar (28).

Position	Number of Tooth	Percentual (%)
Vertical	303	65,16
Medial	36	7,74
Distal	126	27,10
Total	465	100

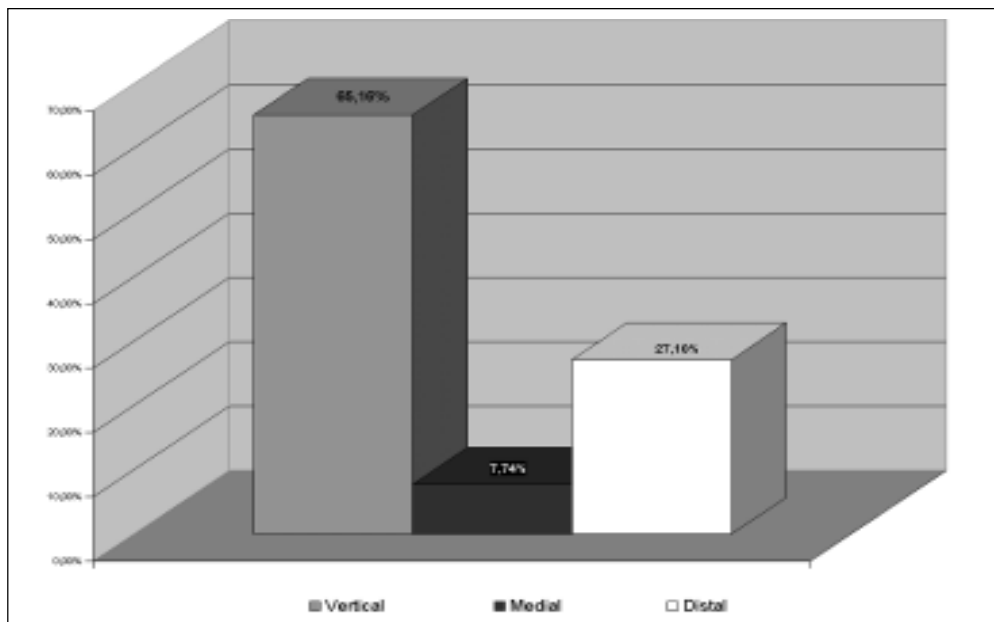


Figure 9 – How much to the positions of the Uppers Left Third Molar (28). It analyzes for the classification of Winter<sup>30</sup> (1926) modified<sup>10,11,12</sup>.

TABLE 3 – How much to the positions of the Lowers Left Third Molar (38). For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).

Position	Number of Tooth	Percentual (%)
A1 Vertical	93	20,52
A1 Medial	21	4,63
A2 Vertical	33	7,28
A2 Medial	03	0,66
B1 Medial	30	6,62
B1 Vertical	36	7,94
B1 Horizontal	03	0,66
B2 Vertical	18	3,97
B2 Distal	03	0,66
B2 Medial	06	1,32
C1 Medial	45	9,93
C1 Vertical	18	3,97
C1 Horizontal	09	1,98
C2 Medial	60	13,24
C2 Vertical	33	7,28
C2 Horizontal	03	0,66
C3 Medial	30	6,62
C3 Vestibular	03	0,66
C3 Vertical	03	0,66
C3 Horizontal	03	0,66
Total	453	99,92

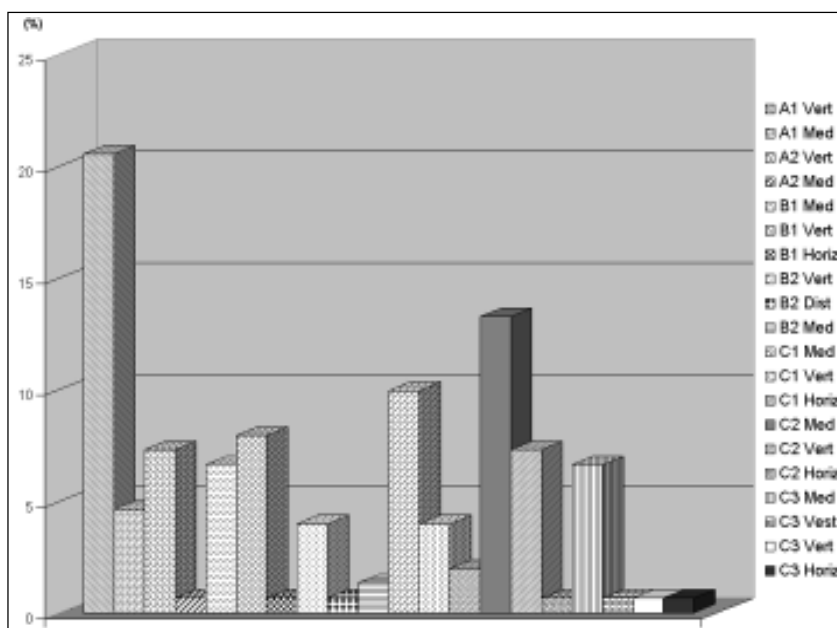


Figure 10 – Result how much to the positions of the Inferiors Left Third Molar (38). For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).



TABLE 4 – For teeth the 38 classifications most frequent. For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).

Position	Percentual (%)
Vertical	51,62
Medial	43,02
Horizontal	3,96
Distal	0,66
Vestibular	0,66
Class I	56,25
Class II	35,07
Class III	8,60
Position A	33,09
Position B	21,17
Position C	45,66

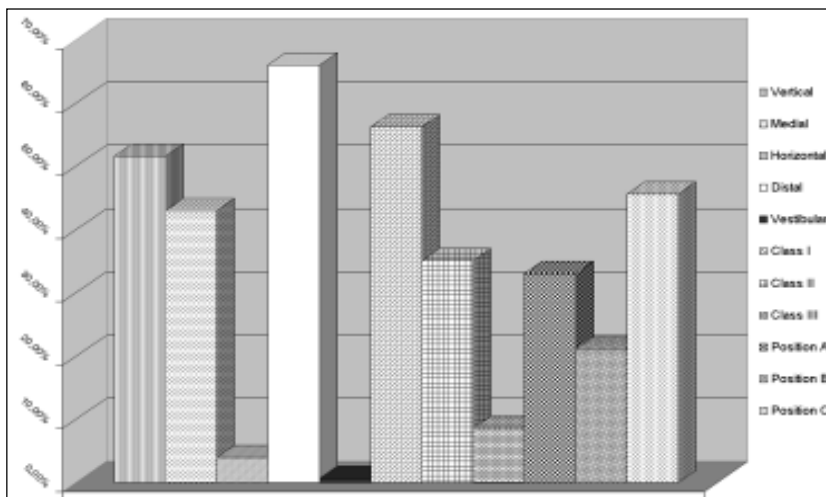


Figure 11 – How much to the positions most frequent of the lowers Left Third Molar (38). For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).

TABLE 5 – How much to the positions of the lowers Right Third Molar (48). For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>3,10,11,12,30</sup> (1926).

Position	Number of Tooth	Percentual (%)
A1 Vertical	69	16,65
A1 Horizontal	03	0,67
A1 Medial	21	4,69
A2 Vertical	51	11,40
A2 Medial	03	0,67
B1 Medial	27	6,04
B1 Vertical	33	7,38
B1 Horizontal	03	0,67
B2 Medial	15	3,35
B2 Vertical	21	4,69
C1 Medial	69	15,65
C1 Vertical	33	7,38
C1 Horizontal	06	1,34
C2 Medial	57	12,75
C2 Vertical	15	3,35
C2 Vestibular	03	0,67
C3 Medial	15	3,35
C3 Vertical	03	0,67
Total	447	101,37

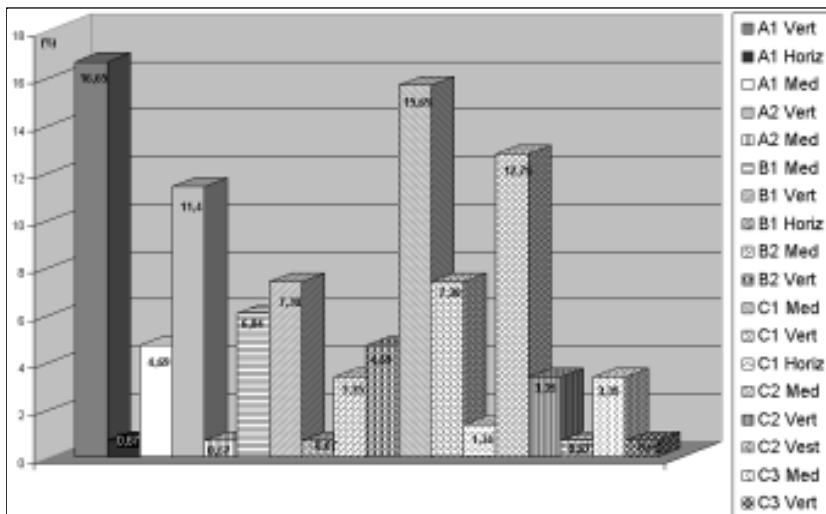
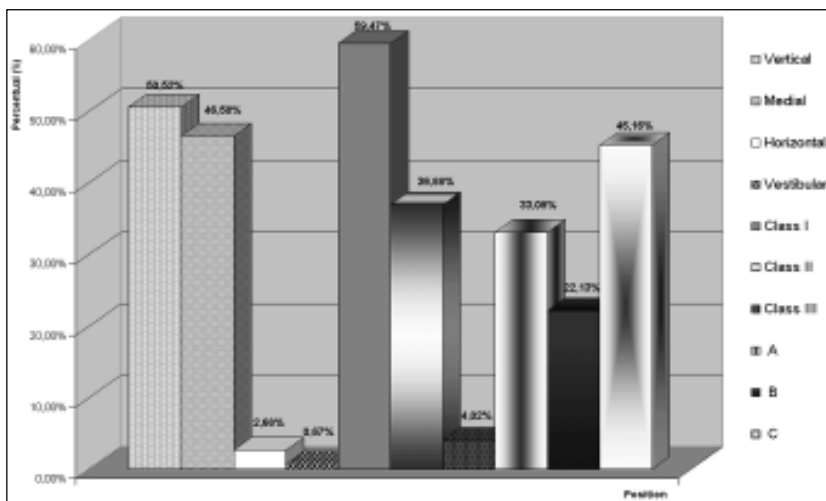


Figure 12 – How much to the positions of the Inferiors Right Third Molar (48). For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).

Figure 13 – More frequent positions of third molar right inferiors. For the classification of Pell and Gregory<sup>20</sup> (1933), Winter<sup>10,11,12,30</sup> (1926).



## DISCUSSION

Our sampling counted on a significant increase of patients of the feminine sort (375), when compared with those of the masculine sort (210). This fact is justified as clear evidence, therefore in the current society; the women are each time more worried about its general health, with its buccal health and, the beauty of the smile. Remembering always that aesthetic and beauty standards are preponderant in the current society.

This result goes of meeting to some research<sup>10</sup> that, also, they had found molar greater frequency of third impacted in the feminine sort, opposing itself, however the determined authors<sup>10,11,12</sup> that they had found greater prevalence in the masculine sort.

This bigger prevalence of retained teeth in the feminine sort must it the fact of maxillaries be finished its period of growth in women, at the time of irruption them third molar ones that, consequently, it does not find space enough and was impacted<sup>10</sup>. Already in the men, the bone growth is extended beyond the period of irruption<sup>10</sup>.

The great number of patients in the eatery band of the 15-20 years (390) and of the 21-25 (138) must probably to the fact of that the young population is trying to decide its problems of buccal health more precociously.

In this research a sampling of five hundred and eighty and five (585) patient ones was studied getting a thousand eight hundred and fifteen (1815) third molar ones, getting a general average of 3,10 teeth third molar ones for patients. When one analyzes the data gotten for the uppers right third molar (tooth 18) and, upper left third molar (tooth 28) notices that both possess practically the same frequency of classification, being that tooth 18 presented 62.66% for the vertical position, 12% for medial and, 25.33% for the distal position. Tooth 28 presented 65.16% for the vertical position, 27.10% for distal position and 7.74% for the medial position. These data corroborate the joined ones in literature<sup>41</sup>, being that these had found as being the second more frequent position the medial one, and us the distal.

The findings of the present research, also, go of meeting to another work<sup>10</sup> that it got as more frequent the vertical position. This comes to reaffirm another study<sup>10</sup> that another one found the position vertical as being more frequent than any 68.32%, followed of distal 17.05% and medial 13.37%.

The findings of the present inquiry, still agree to taken research the effect to the Nigeria<sup>10</sup>, where it was observed that the vertical position for the uppers third molar that more was found in urban zone 68.6% and 62.5% in the agricultural zone. However they are contrary to those studies<sup>04</sup> where the distal position with 75,5% was found that as the that most frequent one, beyond others<sup>08</sup> that, also, they had verified the distal position as being the that most frequent one in 58,45% of the cases.

Oposing other research<sup>11,12</sup>, where if it found the medial position with 39,9% as being the that most frequent one, being that in our research it was noticed as that one of lesser frequency, followed for the vertical line 36% that was the that most frequent one with 62,66% and here, the distal with 23,30%, with approximately same the values for us found 25,33%. All these authors had found as predominant sort the masculine and, in the present inquiry the feminine one was evidenced.

For the lowers third molar, the two teeth in joint way will be analyzed, in view of that the percentage indices had been similar. For tooth 38, as if it observes for the Table 6 the positions most frequent had been: Vertical A1 with 20,52%, Medial C2 with 13,24%, Medial C1 with 9,93%, Vertical B1 with 7,94%, A2 Vertical and Vertical C2 with 7,28%. For tooth 48, for Table 8 they are noticed as more frequent positions: A1 Vertical and Medial C1 with 15,65%, Medial C2 with 12,75%, Vertical A2 with 11,40% and Vertical B1 with 7,38%.

Analyzing the classifications separately it is observed that in accordance with the standardized classifications<sup>11,12,30</sup> in this research met that the positions most frequent had been the vertical line, the medial one, the horizontal line, the distal and the vestibular contest. This comes to agree in partial way to joined data<sup>06,10,24</sup> that they had noticed to be the position most frequent the vertical line with 44,1%, followed of the horizontal line with 29,4% and, the medial one with 26,5%.

The findings of the present inquiry come to corroborate studies<sup>10,29</sup>, that they had found 34.56% of teeth for the vertical position, 32.36% for medial position and, 25% for the horizontal line. They are, also, in accordance with the works of some authors<sup>25,27</sup>. They had been, however contrary to some studies<sup>04</sup> that they had more frequently verified to be the medial position that one with 58%, being that, also it was evidenced that the medial position was that one as bigger frequency<sup>10</sup>. This everything in the same way that was gotten as more frequent the medial positions with 53,2%, the vertical position with 21,4%, and

the horizontal position with 21,2%<sup>11,12</sup>. It is proven that, also, that an was found determined predominance medial position with 42,25%<sup>07</sup>, while that other researchers had evidenced as being more frequent the medial position with 42,01% and the vertical position with 40,78%<sup>10</sup>. In a similar way the medial position with 60% was noticed as the most frequent one<sup>08</sup>.

It was observed in research that the position more frequently found was the medial one, followed of the vertical line and horizontal line<sup>10,14</sup>. In the Nigeria the medial one for urban zone 49% and agricultural zone 54% was evidenced as being the position most frequent<sup>18</sup>. They still agree as being most frequent the medial position determined research<sup>03,05,09</sup>. However, they disagree with other researchers that had found the horizontal position with 41% and the vertical line with 20%, as the positions most frequent<sup>10</sup>.

According to classification<sup>20</sup>, for teeth 38 and 48 met respectively:

Classification	Tooth 38 (%)	Tooth 48 (%)
Class I	56,25	59,47
Class II	35,07	36,88
Position A	33,09	33,08
Position B	21,17	22,13
Class III	8,60	4,02

Being, therefore the most frequent Class I as together with position C. These data are contradictory to some findings that had gotten<sup>10</sup> as more frequent Class II and the position, opposing, also, other authors<sup>03,05,08,10,14</sup> that they had gotten Class II and position B as that more frequent.

The fact of the results of the present research to disagree with definitive authors, leads to believe varies possibilities. The fact of the northwest of *Santa Catarina* to have been colonized for descendants of italian and german origin, almost that exclusively, it could have influenced how much to the face standard of the patients. Moreover, the adequate habits of buccal hygiene, having as consequence the maintenance of all the permanent teeth in the mouth would make possible a bigger number of dental retention due to space for its correct irruption.

The fact of the majority of the sampling of the present inquiry to have been of young patients in the eatery band between 15-20 years can seem and lead to believe that the young is each time more

worried about its buccal health. This seems to suggest that with passing of the years these teeth that today if present retained, will be able to change its classification how much to its positioning in the arches, also being able to burst<sup>10</sup>.

## CONCLUSIONS

Based in the joined results it can conclude that:

1. The position most frequent for uppers third molar in this sampling is respectively vertical, distal and medial, according to classifications proposals.
2. The positions most frequent for the lowers third molar are respectively the vertical line, medial and the horizontal line.
3. The most frequent position for lowers third molar is Class I C.
4. Bigger prevalence of patients of feminine sort 64.10% was observed, in relation to the patients of masculine sort 35,90%.
5. For both the sorts the positions most frequent for uppers and lowers third molar were the vertical line and, Class I C.
6. More frequent that one of the 15-20 was gotten as eatery band years with 66,66% and, for this eatery band the Vertical positions and Class I C as those most frequent ones.

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