

Seventy-four students were evaluated, including 59 women (79.73%) and 15 men (20.27%). The clinical examination revealed that 70 people (94.60%) had third molar teeth, 56 women (80%) and 14 men (80%) and 14 men (Fig. 1, Fig. 2).

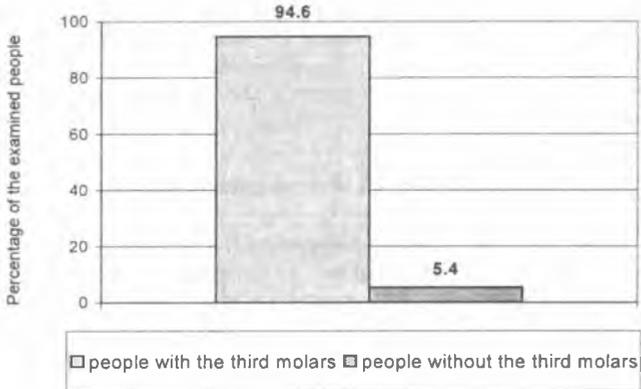


Fig. 1. Prevalence of third molars in the studied population

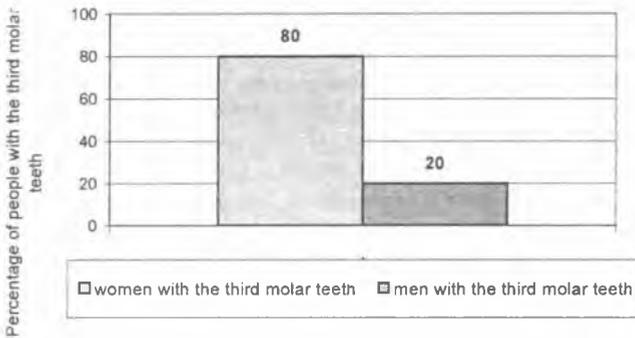


Fig. 2. Prevalence of third molars in the studied population according to sex

Table 2. Prevalence of a particular missing third molar with reference to sex

Missing third molar	In women	In men	Total	% of missing teeth
18	12	2	14	24.56
28	12	2	14	24.56
38	14	3	17	29.82
48	8	4	12	21.05
Total	46	11	57	100

Forty seven individuals (63.51%) had all their third molars, 36 women and 11 men. One missing third molar was observed in 11 women (14.86%), two missing third molars in six subjects (8.11%): four women and two men. Also six people lacked three third molar teeth, including five women and one man, whereas four students (5.41%) lacked all four third molars. These data are included in Table 1. The prevalence of a particular third molar missing with reference to the subjects' sex is shown in Table 2. In the examined population of students 57 missing third molar teeth were noted, 46 teeth in women and 11 in men. The most common missing third molar tooth was the lower left one; 17 such missing teeth were observed (29.82%). Both upper third molars missing were found in almost the same percentage of cases: 24.56%. There were also 12 missing lower right third molars (21.05%).

Table 3. Most common causes of missing third molars acc. to sex

	Number of missing third molars				total
	extracted for orthodontic reasons	extracted for surgical reasons	missing buds	extracted because of caries	
Women	11	2	28	5	46
Men	-	-	11	-	11
Total	11	2	39	5	57
%	19.30	3.51	68.42	8.77	100

The most common causes of missing third molars with reference to the subjects' sex are presented in Table 3. Missing buds of the third molars were the most common cause of tooth absence: 39 missing buds (68.42%) were observed, 28 in women and 11 in men. The following were observed in women only: 11 third molars (19.30%) extracted due to orthodontic indications, two teeth (3.51%) extracted due to surgical indications and five teeth (8.77%) removed because of untreated caries and caries complicated with diseases of the pulp and periapical tissues.

Among the 47 people (63.52%) who had all their third molars only 23 subjects (48.94%) had all the four third molars erupted. In eight people (17.02%) all four third molars were retained. Four people (8.51%) had three teeth retained, eight people (17.02%) had two teeth retained, and four people (8.51%) had one retained third molar (Table 4).

Table 4. Subjects with all third molar teeth acc. to sex

Subjects with all third molar teeth	Women	Men	Total	%
All four teeth erupted	17	6	23	48.94
Four teeth retained	6	2	8	17.02
Three teeth retained	3	1	4	8.51
Two teeth retained	6	2	8	17.02
One tooth retained	4	-	4	8.51
Total	36	11	47	100

Table 5 shows the numbers and percentages of third molars retained in the maxilla and the mandible. Forty retained teeth altogether (48.19%) were found in the mandible, including 30 teeth completely retained (36.14%) and 10 teeth partially retained (12.05%). In the maxilla there were 43 retained teeth (51.81%), with 30 teeth completely retained (36.14%) and 13 teeth retained partially (15.66%).

There were 83 retained third molars in total, with 60 teeth fully retained (20.27%) and 23 teeth partially retained (7.77%). In women 66 retained teeth (22.30%) were found, in this number

46 teeth (15.54%) were entirely retained and 20 (6.76%) were partly retained. Seventeen retained teeth (5.74%) were observed in men, including 14 completely retained (4.73%) and 3 retained partially (1.01%). Altogether there were 156 erupted third molars (52.70%), with 124 teeth (41.89%) in women and 32 (10.81%) in men (Table 6).

Table 5. Retained third molars according to location in maxilla or mandible

Retained third molar teeth		No. of retained teeth		% of retained teeth	
In mandible	completely	30	40	36.14	48.19
	partially	10		12.05	
In maxilla	completely	30	43	36.14	51.81
	partially	13		15.66	
Total		83		100	

Table 6. Third molar teeth: missing, retained and erupted, according to sex

Sex	Third molar teeth											
	retained						erupted		missing		total	
	completely		partially		total							
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Women	46	15.54	20	6.76	66	22.30	124	41.89	46	15.54	236	79.73
Men	14	4.73	3	1.01	17	5.74	32	10.81	11	3.72	60	20.27
Total	60	20.27	23	7.77	83	28.04	156	52.70	57	19.26	296	100

DISCUSSION

In the studies of Cieślińska-Wilk et al. the majority of retained teeth or teeth with obstructed eruption occurred in the mandible: 65%; in the maxilla 35%. Studies by Łangowska-Adamczyk et al. indicate an almost fourfold higher prevalence of retained third molars in the mandible than in the maxilla, i.e. 80% and 20% respectively.

In the studied population of students of the Medical University of Lublin, Poland, these percentages were 48.19% for the mandible and 51.81% for the maxilla, i.e. there was no significant difference between the number of third molar teeth retained in the mandible or in the maxilla. These results are in agreement with those obtained by Thilander et al. where the prevalence of upper and lower retained third molars is the same.

In the studies by Łangowska-Adamczyk et al. there were more partially retained teeth: 66.20% in the mandible and 17% in the maxilla. As for completely retained third molars there were 13.80% and 3% in the mandible and maxilla, respectively. The studies by Thilander et al. also point to a higher prevalence of partially retained teeth. Own studies show a greater percentage of completely retained third molars: 36.14% in the mandible and the same in the maxilla. Partially retained teeth in the mandible accounted for 12.05% and in the maxilla for 14.67%.

Tokarska reports the prevalence of missing tooth buds of 10.50%, and of missing one third molar of 28.20%. Similarly, according to Jańczuk, the percentage of missing buds of third molar teeth is 10–25%. Our own studies show that of all missing third molars those absent due to the lack of a bud constituted 68.42%, whereas just one missing bud accounted for 15.38% and concerned six women.

CONCLUSIONS

1. In the examined population, aged 21–25 years, third molar teeth were present in 94.60% of the subjects.
2. The most frequent finding in an individual was one missing third molar.
3. The most common missing third molar was the lower left.
4. No difference was observed between the number of missing third molars in the mandible and in the maxilla.
5. In the studied population the most common cause of absence of a third molar tooth was complete retention.

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SUMMARY

The present study assessed the occurrence of third molar teeth in the 21–25-year-old population of students of the Medical University of Lublin, Poland. The authors examined 74 people and analysed their panoramic dental radiograms. In the studied population, aged 21–25 years, third molars were present in 94.60% of subjects. In most cases, an individual person lacked one third molar tooth, usually the lower left. No difference was observed between the number of third molars retained in the maxilla and in the mandible. In the studied population entirely retained third molars prevailed.

Trzecie zęby trzonowe w populacji studentów AM w Lublinie w wieku 21–25 lat

W pracy oceniono występowanie trzecich zębów trzonowych w populacji studentów Akademii Medycznej w Lublinie w wieku 21–25 lat. Autorzy przebadali 74 osoby oraz ocenili zdjęcia pantomograficzne. W badanej populacji w wieku 21–25 lat trzecie zęby trzonowe były obecne w 94,60% przypadków. U większości osób brakowało jednego trzeciego zęba trzonowego, najczęściej dolnego lewego trzeciego trzonowca. Nie zaobserwowano różnicy pomiędzy liczbą zatrzymanych trzecich zębów trzonowych w szczęcie i w zuchwie. W badanej populacji przeważały całkowicie zatrzymane trzecie zęby trzonowe.