

Did the prescription of antibiotics for Otitis Media decrease between 2001 and 2004 in general practice in France?

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Objective

To assess the variation of antibiotics prescriptions in otitis media in France between 2001 and 2004.

Method

Retrospective study concerning 2001 and 2004.

Data were collected in real time and ongoing for every patient in an electronic medical record by GPs using standardised clinical situation as well as computerised prescriptions.

We selected all consultations presenting an otitis media diagnosis.

We looked for antibiotic prescriptions associated to these consultations and analysed the type of antibiotics using ATC classification.

We calculated the percentage of consultations with antibiotic prescription in 2001 and 2004 overall and in 10 years age groups, and compared both figures using chi square test.

We classified the antibiotic prescription using ATC classes and calculated the percentage of prescriptions for each class in 2001 and 2004, and compared both figures using chi square test.

Results

107,166 patients and 315,137 consultations in 2001.

104,912 patients and 301,926 consultations in 2004.

Gender	2001	2004
Female	2,420	1,901
Male	2,568	2,029
NA	133	85
Total	5,121	4,015
Patients with otitis Media		

Age groups	2001	2004	p
00-01	72.9%	71.4%	0.4
02-09	71.1%	66.7%	<10 ⁻³
10-19	62.3%	61.0%	0.7
20-29	58.9%	51.1%	0.1
30-39	61.1%	53.6%	0.1
40-49	62.9%	45.3%	<10 ⁻³
50-59	58.1%	51.0%	0.2
60-69	54.8%	37.0%	0.02
70-79	37.1%	30.0%	0.4
80-89	50.0%	48.0%	0.9
Total	68.4%	63.1%	<10⁻³
% of patients with AB prescription in 2001 and 2004			

		2001	2004	% en 2001	% en 2004	p
Beta-lactam	Cephalosporin	1,627	1,253	46.0%	48.9%	0.02
	Total Penicillin	1,545	1,107	43.6%	43.2%	0.71
	<i>Penicillin combined</i>	1,291	684	83.6%	61.8%	<10 ⁻³
	<i>Penicillin extended spectrum</i>	248	420	16.1%	37.9%	<10 ⁻³
Macrolides		102	76	2.9%	3.0%	0.85
Quinolone		25	24	0.7%	0.9%	na
Other AB		241	104	6.8%	4.1%	<10 ⁻⁶
Total AB		3,540	2,564			

Discussion

We found a statistically significant decrease overall.

Statistically significant decreases were shown for three age groups: [02-09], [40-49] and [60-69].

The comparison of the respective part of AB classes between 2001 and 2004 shows a significant decrease for penicillin combined and penicillin with extended spectrum.

As the GPs of the OGM are not representative of the French GP population those last results can't be extrapolated outside of the network.

Conclusion

There is a significant decrease in antibiotic prescription for otitis media, statistically significant for the [02-09], [40-49] and [60-69] ages groups.

For the GPs of the OGM it was not linked to changes of the prescribed antibiotic classes, except for a decrease in penicillin combined and penicillin with extended spectrum.

SFMG thanks all GPs and patients anonymously participating to the OGM for supplying their practice data.

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