

Have GPs reduced antibiotics prescription in rhinopharyngitis?

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Context

The large prescription of antibiotics appears responsible for the increase of bacteria resistance all over the world. In France the French Health Fund launched in 2002 a vocational training for doctors and a public awareness campaign related to the risk of misuse of antibiotics. Data from French Health Fund showed a global decrease in antibiotics prescriptions the next year, but no disease related data were available. It appeared interesting to evaluate if such decrease applied in particular to rhinopharyngitis.

Method

Retrospective study concerning 2001 and 2004. Data were collected in real time ongoing for every patient in an electronic medical file by GPs using standardised clinical situation as well as computerised prescriptions. We selected all consultations presenting a rhinopharyngitis

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.

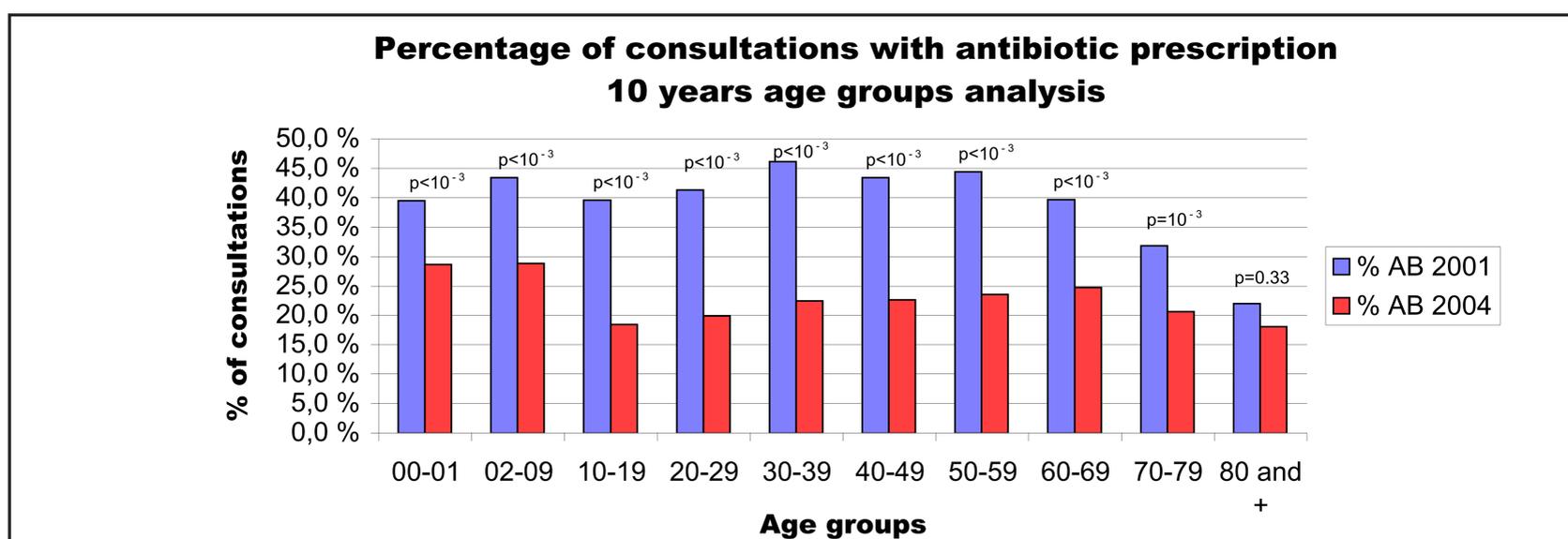
Results

85 GPs

17,328 consultations with rhinopharyngitis in 2001 (5,5% of consultations).

15,387 consultations with rhinopharyngitis in 2004 (5,1%).

Global decrease of 42,2% of the part of consultations with antibiotic prescription (41,6 % in 2001 to 24,0 % in 2004 $p < 0.0001$).



		2001	2004	p
Beta-lactam	Cephalosporin	23,2 %	21,9 %	0,09
	Penicillin (total)	43,8 %	39,1 %	$< 10^{-6}$
	<i>Penicillin large spectrum</i>	35,6 %	32,5 %	0,001
	<i>Penicillin associated</i>	8,2 %	6,6 %	0,002
Macrolides		22,9 %	20,2 %	$< 10^{-3}$
Quinolone		0,9 %	1,2 %	0,11
Clofoctol (Phenol)		7,1 %	15,5 %	$< 10^{-6}$
Other antibiotics		2,1 %	2,2 %	0,5

Part of major ATC classes in antibiotics prescriptions in 2001 and 2004

Discussion

We found major decrease overall. Statistically significant decreases were shown for all age groups, except elderly people (80 years and more).

The comparison of the respective part of AB classes between 2001 and 2004 shows:

- A decrease for all penicillin and macrolides,
- A stability for cephalosporin and quinolone,
- A doubling of clofoctol.

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

The decrease in antibiotic prescription for rhinopharyngitis is a major one (42%) and concerns all age groups < 80.

For the GPs of the OGM it was linked to a shift of antibiotic from penicillin and macrolides to clofoctol.

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