

Allergic Conjunctivitis: Comparison of Four Protocols

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Abstract

Original Research Article

Allergic conjunctivitis represents one of the most frequently encountered pathologies in daily ophthalmological practice, but despite the evolution of knowledge, its therapeutic management differs according to the practitioners, the aim of our work is to compare four therapeutic protocols in terms of efficiency. Thus, we carried out a prospective study concerning 120 patients followed up for minimal to moderate allergic conjunctivitis, during 08 months, the follow-up made thanks to the scores which we established. For the analysis we were based on adapted statistical tests (SPSS 17.0) the four protocols all by local route are: A (artificial tears), B (antihistamines), C (mast cell anti-granulants) and D (antihistamines associated with anti-granulants). At the end of the work, the four treatment protocols were compared, group D seems the most effective followed by group C then B and last A, 87.5% of patients adhered well to the instructions, in 6.66% a change in protocol was the rule. Minimal to moderate allergic conjunctivitis is a common pathology but too often ignored and untreated, if not on an ad hoc basis. Several studies have shown different results depending on the molecule chosen. Towards a single consensus for the management of allergic conjunctivitis, there is still a way to go. Conclusion to treat allergic conjunctivitis is to prevent chronicization and to confer better well-being on the patient. The antihistamine and anti-granulating combination seems to be one of the most encouraging protocols.

Keywords: Allergic Conjunctivitis granulants.

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INTRODUCTION

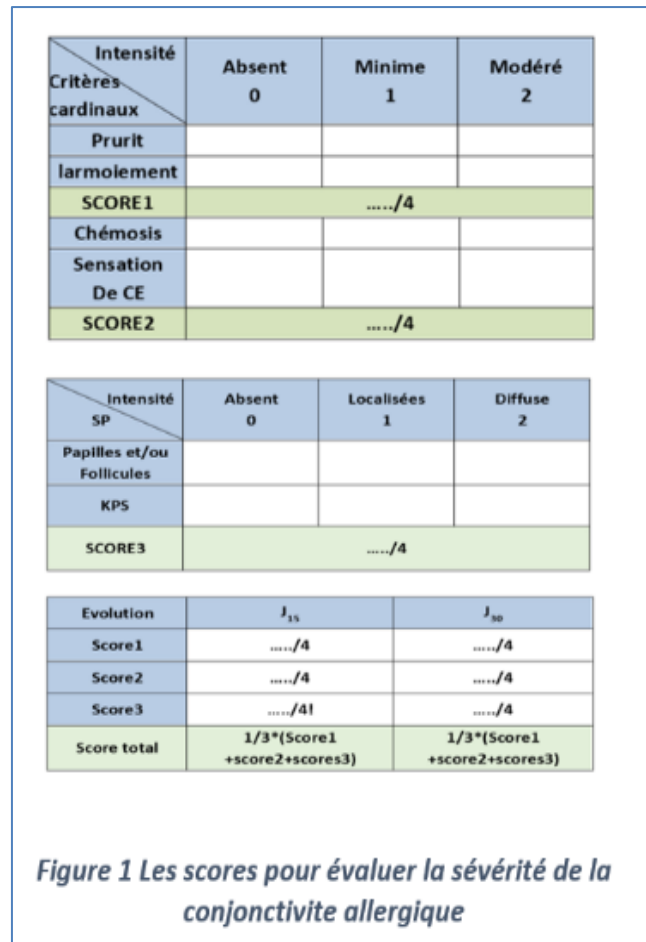
The prevalence of allergic diseases has increased considerably over the past 20 years, the eye is effectively exposed to the outside environment and to environmental attacks, allergic conjunctivitis, which is very frequent in current practice, poses a problem of therapeutic regimen, which must be considered. simple, devoid of complications and non-binding for everyday life.

The aim of our work is to compare four therapeutic protocols in terms of efficacy.

PATIENTS and METHODES

Single-center prospective study involving 120 patients, spanning a period of eight months, almost under the same examination conditions with follow-up thanks to the scores we established (fig 1).

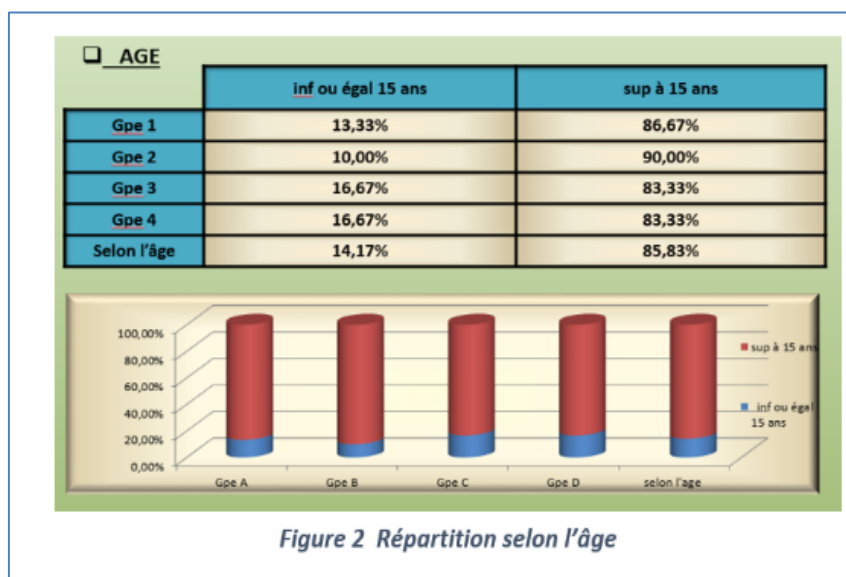
Inclusion criteria were set such as : Patients of both sexes; Aged 6 to 69 and Bilateral Symptoms; and on the other hand, criteria exclusion such as severe allergic conjunctivitis, pathology iris or the anterior or posterior segment, an organic amblyopia , trauma or ocular infection in the month before and the subjects wearing contact lenses.



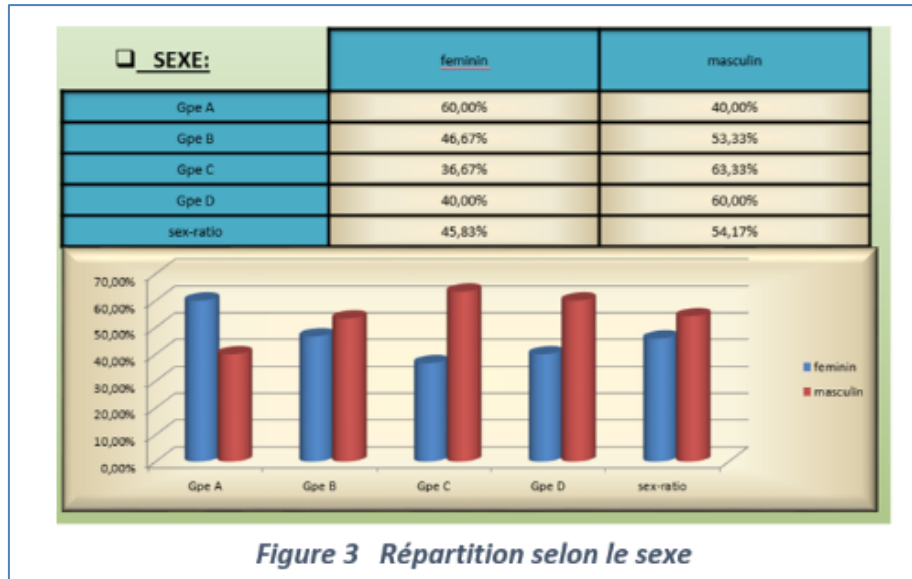
- The four local protocols are:
 - Gp 1 / A : Artificial tears,
 - Gp 2 / B : Antihistamines,
 - Gp 3 / C : Mast cell anti-degranulants
 - Gp 4 / D: The antihistamine associated with antidegranulants.

RESULT

The mean age was found to be 32 years with a predominance of the age group greater than 15 years (fig 2).



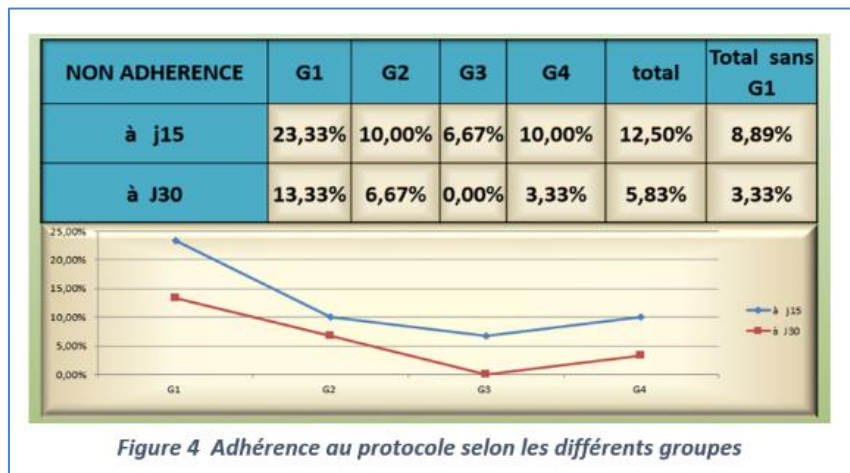
In addition, 54% of patients were men and 46% women with a similar distribution in groups 2, 3 and 4 (fig 3).



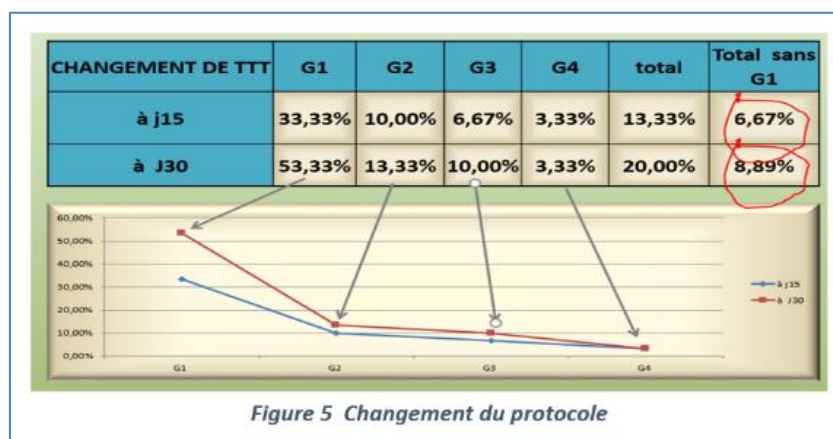
Ophthalmologic history other than allergic conjunctivitis:

- 14 patients, blepharitis, an ocular dryness, eczema eyelids
- A general history of the type: allergic rhinitis (14.16%), asthma (5%),

- Skin allergy (2.5%), without significant difference between the four groups.
- There was a very significant loss of sight in group A while it was very low in group C (fig 4).

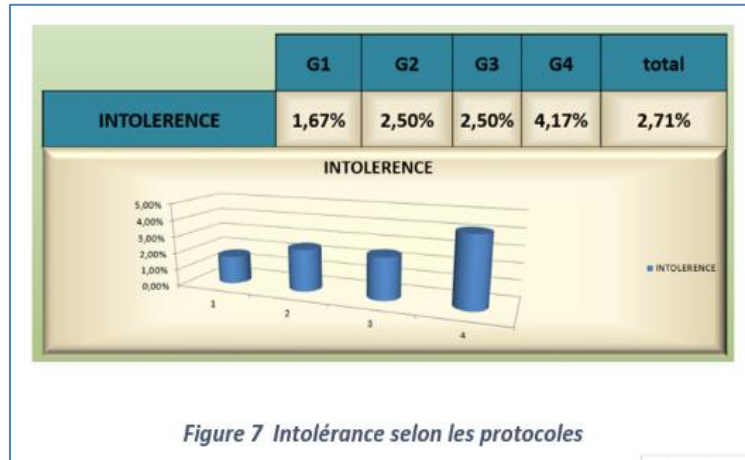


Changing the processing reduced in Group D reflects indirect by a satisfaction (Fig 5).

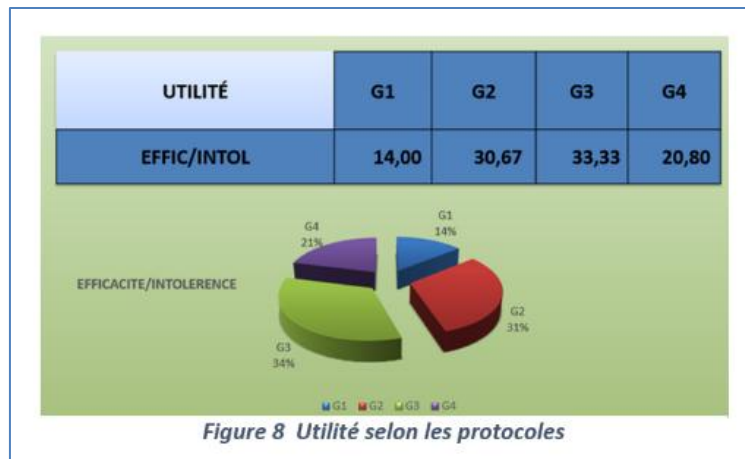


The effectiveness of the treatment was observed in group 4 then group 2 then group 1 (fig 6).

Intolerance was found in group 4 more than the other groups (fig 7).



The group 3 protocol is the most effective with fewer side effects (fig 8)



DISCUSSION

In our study, the allergic conjunctivitis per year was the most common form; the combination with other General manifest of allergy such as the allergic rhinitis emphasizes the importance of questioning.

The four groups were randomized and homogeneous at inclusion, based on demographic criteria. The four therapeutic strategies tested included an instillation 2 × / d except LA: 3 × / d.

The results show that the therapeutic protocols B, C and D have, in the same way, led to a marked improvement in the clinical scores under treatment on D15 and even better at D30 without any significant statistical difference between these 3 groups.

Unlike group A where the improvement was significantly less. However, monotherapy provides an indisputable advantage over bitherapy in terms of tolerance and acceptability of the treatment.

In monotherapy, a greater utility of antidegranulants % than anti-H this is in line with the results recently reported by Leonardi [1], and Lazreg [2].

Moreover, monotherapy makes it possible to simplify the treatment, the patient using only one eye drops, which ensures better compliance.

CONCLUSION

Allergic conjunctivitis is an increasingly frequent pathology, which poses a real problem of therapeutic strategy. In milder forms of conjunctivitis allergiques and comparing 3 regimens monotherapy was objectified significant efficiency antidegranulants mast and antihistamines compared to artificial tears; Efficacy of antidegranulants compared to antihistamines.

As elsewhere, the monotherapy comparison (antidegranulants) and combination therapy were shown similar efficacy with tolerance lesser of the combination therapy.

Conflict of interest

The authors declare no conflict of interest.

Contributions from authors

All authors have read and approved the final version of the manuscript.

REFERENCES

1. Leonardi, A., Bremond-Gignac, D., Bortolotti, M., Violato, D., Pouliquen, P., Delval, L., ... & Fregona, I. A. (2007). Clinical and biological efficacy of preservative-free NAAGA eye-drops versus levocabastine eye-drops in vernal keratoconjunctivitis patients. *British journal of ophthalmology*, 91(12), 1662-1666.
2. Lazreg, S., Colin, J., Renault, D., & Hartani, D. (2008). Traitement de la conjonctivite allergique per-annuelle et saisonnière: comparaison de deux protocoles thérapeutiques. *Journal français d'ophtalmologie*, 31(10), 961-967.