

Article Information

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CC-BY 4.0**Article DOI** 10.36876/smpmph.1001**Case Report****The National Strategy for the Control of
Chronic Glaucoma****Jaouad Hammou****Epidemiology and Disease Control Directorate, Ministry of Health, Rabat, Morocco***Introduction**

Chronic glaucoma, with its risk of irreversible blindness, is one of the major public health problems in Morocco and the world. Its identification, because of the almost asymptomatic nature of the disease, is the first if not the only means available to control it or at least to act when there is still time, so as not to become blind without realizing it [1-9].

It is also important to point out that glaucoma has some specificities in relation to its definition since there are several forms of glaucoma (glaucoma), the difficulty of making an early diagnosis (insidious and asymptomatic disease), the means of Diagnosis and therapeutic means (medical: observance and cost, surgical: difficult to accept by the patient) [10-11].

In this regard, the Ministry of Health developed the national chronic glaucoma strategy following a national consensus that standardized and standardized concepts related to the definition of chronic glaucoma, its identification, Diagnosis and therapeutic management in relation to the national health care system.

This workshop provided answers to five key questions, which are as follows:

1. How is a case of chronic glaucoma defined?
2. What are the risk factors to look for?
3. What is the target population?
4. What are the measurement tools for case identification and diagnosis?
5. How can we identify and manage a case of chronic glaucoma in relation to the health care system?

Definition of a Case of Chronic Glaucoma [12-15]

Chronic glaucoma is defined as bilateral, insidious and progressive chronic optic neuropathy characterized by:

- Pathological papillary excavation
- A characteristic alteration of the Visual Field (CV)
- Generally associated with ocular hypertonic

Description of the Risk Factors to Be Used To Define the Target Population [17-19]

While the causes of increased IOP remain unclear, risk factors for glaucoma development are well known. It is better to be attentive, especially as their effects tend to be cumulative.

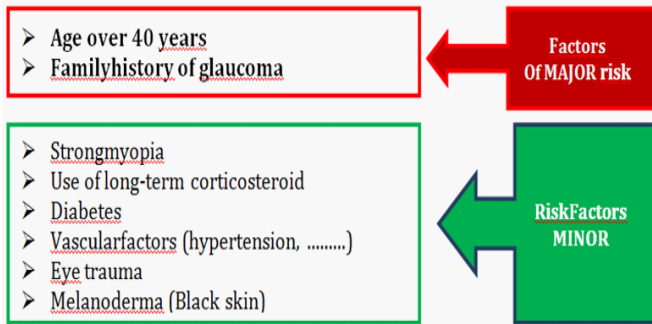
The risk factors used in the national strategy are as follows:

- Age over 40 years
- Familyhistory of glaucoma
- Strongmyopia Age over 40 years
- Familyhistory of glaucoma
- Strongmyopia
- Use of long-term corticosteroid
- Diabetes
- Vascularfactors (hypertension,)

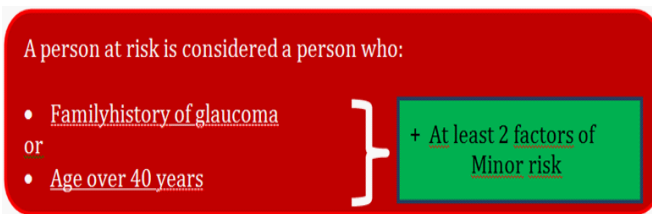
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- Eye trauma
- Melanoderma (dark skin)
- Use of long-term corticosteroid

This set of factors has been categorized into two groups to define a suspect case and hence the population at risk (Figure 1)



The population at risk (figure 2)

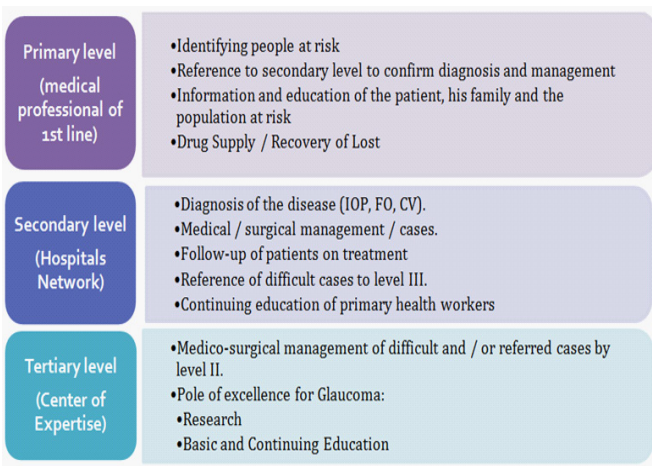


Identification of measurement tools: screening and diagnosis of chronic glaucoma

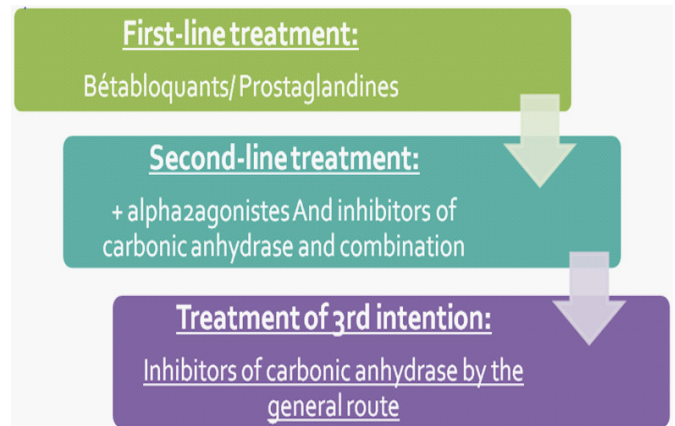
Chronic glaucoma is considered to be any person having:

- a pathological papular excavation in the fundus of the eye (FO)
- a characteristic visual field image (CV)
- ocular hypertonia > 21 mm Hg (PIO) +/-

Management of chronic glaucoma in relation to the care pathway (figure 3)



Therapeutic management of chronic glaucoma Traitement médical (figure 4)



The national strategy to fight blindness caused by chronic glaucoma advocates an algorithm for therapeutic decision-making, starting with monotherapy (a betablocker or a prostaglandin) by local route. Depending on the course of the disease and the effectiveness of the treatment, the protocol may be changed to dual therapy, triple therapy or a change in the route of administration of the medicinal products or even to other therapeutic options.

Surgical treatment

Indications for surgical treatment:

- Evolution of the disease (degradation)
- Failure of medical treatment
- No compliance of the patient with the treatment

Conclusion

Glaucoma has become an increasing public health problem. About 2.2% of the Moroccan population suffers from this silent disease. It is the second cause of blindness in Morocco after the cataract [20-23].

In the less developed countries, glaucoma is second only to the causes of blindness (12%) after cataract (50%). In 2002, the number of blind people per glaucoma in the world was estimated at 4.5 million and in 2010 was over 8 million [24-26].

Currently, ophthalmic health facilities have the tools to identify people at risk and diagnosis, including intraocular pressure, fundus and visual field.

References

1. Le glaucome, Pr Jean-Philippe Nordman – Pr Philippe Denis
2. Glaucome : Guide pour le patient, Pr Josef Flammer
3. Les glaucomes – volume1, Pr Alain Béchetoile
4. D'après le Pr Alain BECHETOILLE (PARIS): Ouvrage : Les glaucomes (T1 et T2) : Japprenard. Fiche Glaucome pratique N°20 (Chauvin ed) : Qualité de Vie du Glaucomateux
5. Haute Autorité de santé France - Service évaluation médico-économique et santé publique - Novembre 2006
6. FLAMENT J. MASSON , Ophtalmologie Pathologie du système visuel, 2002: 219-247.
7. MANDAVA S, SWEENEY T, GUYER D. Atlas de poche en couleur d'ophtalmologie. 2001: 238.

8. EL ALLOUSSI T, HAMMOU J, BERRAHO A. Epidémiologie du glaucome primitif à angle ouvert - Espérance médicale. 2006; 13: 236.
9. EL ALLOUSSI T, BERRAHO A. Prévalence du Glaucome à Angle Ouvert et Facteurs de risques dans une population marocaine à propos de 1182 cas. année académique. 2009-2010.
10. Ouertani A, Zhioua R, Trabelsi A, Jrad J. Prevalence of chronic open-angle glaucoma in a county in Tunis. J FrOphtalmol. 1995; 18: 178-82.
11. Tuck MW, Crick RP. The age distribution of primary open angle glaucoma. Ophthalmic Epidemiol. 1998; 5: 173-183.
12. De Voogd S, de Jong PT, Ikram MK, Wolfs RC, Jansonius NM. Incidence of open-angle glaucoma in a general elderly population: de Rotterdam Study. Ophthalmology. 2005; 112: 1487-1493.
13. Klein BE, Taylor HR, West S, Friedman DS, Wolfs RC et al. Eye Diseases Prevalence Research Group. Prevalence of open-angle glaucoma among adults in the United States. Arch Ophthalmol. 2004; 122: 532-538.
14. Lee A, Mukesh BN, Mc Carty CA, Taylor HR. Risk factors associated with the incidence of open-angle glaucoma: the visual impairment project. Invest Ophthalmol Vis Sci. 2003; 44: 3783-3789.
15. Sommer A. Glaucoma risk factors observed in the Baltimore Eye Survey. Curr Opin Ophthalmol. 1996; 7: 93-98.
16. Hennis A, Wu SY, Nemesure B, Leske MC, Barbados Eye Studies Group. Hypertension, Diabetes, and longitudinal changes in intraocular pressure. Ophthalmology. 2003; 110: 908-914
17. Gordon MO, Beiser JA, Brandt JD. The Ocular Hypertension Treatment Study Group. Baseline factors that predict the onset of primary open-angle glaucoma. Arch Ophthalmol. 2002; 120: 714-720.
18. Dielemans I, de Jong PT, Stolk R, Vingerling JR. Primary open-angle glaucoma, intraocular pressure and diabetes mellitus in the general elderly population. The Rotterdam Study. Ophthalmology. 1996; 103: 1271-1275.
19. Mitchell P, Smith W, Chey T, Healey PR. Open-angle glaucoma and diabetes: the Blue Mountains eye study, Australia. Ophthalmology. 1997; 104: 712-718.
20. Tielsch JM, Katz J, Quigley HA, Javitt JC, Sommer A. Diabetes, intraocular pressure, and primary open-angle glaucoma in the Baltimore Eye Survey. Ophthalmology. 1995; 102: 48-53.
21. Lee AJ, Rochtchina E, Wang JJ, Healey PR. Does smoking affect intraocular pressure? Findings from the Blue Mountains Eye Study. Journal of Glaucoma. 2003; 12: 209-212.
22. Prévention de la cécité et des déficiences visuelles – Organisation mondiale de la Santé (site web oms)
23. Recommendations of EMR Regional Meeting on Development of Public Health Approaches in Management of Glaucoma - Regional Workshop on the Development of Public Health Control Strategies in Glaucoma. Emro, Cairo, 2009.
24. Denis P, Nordmann JP, Sellem E. GlaucomeScan Guide interactif du diagnostic clinique du glaucome [cederom]. Allergan, 1999.
25. Spalton DJ, Hitchings RA, Hunter PA. Atlas d'ophtalmologie clinique. 2e ed. Bruxelles ; Paris : De Boeck universite. 1996; 1560.
26. Rapport de l'enquête nationale sur les prévalences et causes de la cécité et de la baisse de vision au Royaume du Maroc (ENCPDV)- 1992.