

PROTOCOLS IN  
EYE CONDITIONS



PROTOCOL BOOKLET

BIANCA MARIA STIVALA

This booklet was compiled by Bianca Maria Stivala as part of an undergraduate project entitled “Protocols in Eye Conditions” carried out for the partial fulfilment of the requirements of the course leading to the Degree of Bachelor of Pharmacy (Honours).

The study was carried out under the supervision of Professor Lilian M. Azzopardi, Head of Department, Department of Pharmacy, University of Malta.

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CONDITIONS**

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**BIANCA MARIA STIVALA**

**2011**

## P R E F A C E

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Pharmacists are commonly consulted about the management of signs and symptoms of common eye conditions. Pharmacists are in a position to identify signs and symptoms that require immediate referral. They are in a position to support patients in self-management of dryness, conjunctivitis and external segment and eyelid conditions. In the management of eye conditions patients need to be educated about the proper use of ophthalmic medications.

The protocols presented in this handbook have been developed by Bianca Maria Stivala, a pharmacy student as part of her project. This project is part of a research study being undertaken at the Department of Pharmacy with the aim of developing and disseminating protocols for the local scenario that are evidence-based.

Professor Lilian M.Azzopardi  
Head, Department of Pharmacy

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# CONTENTS

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How to use this booklet	2
Interpretation of shapes	3
Protocol for External Segment & Eyelid Conditions	4
Protocol for Conjunctivitis	10
Protocol for Dry Eye Disease	15
References	21

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## HOW TO USE THIS BOOKLET

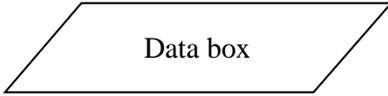
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This booklet contains three flow chart protocols whose aim is to guide pharmacists in diagnosing and managing ocular conditions and recognising conditions which warrant referral. The protocols are guidelines compiled using evidence-based medicine, which when coupled with the pharmacist's experience provide the best pharmaceutical care to the patient.

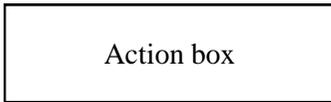
This booklet is to be used with a companion explanatory text handbook which contains explanations and references for each protocol step. The text which corresponds with treatment and management steps provides more detail about pharmacological and non-pharmacological patient advice, which is of practical significance.

The handbook is available online as a downloadable and printable A4 size document entitled "Protocols in Eye Conditions Handbook" at URL <http://www.um.edu.mt/ms/pharmacy/research/protocols>

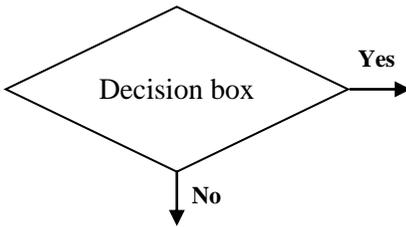
## INTERPRETATION OF SHAPES



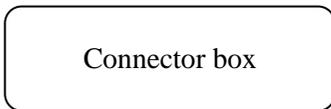
Known information about the patient



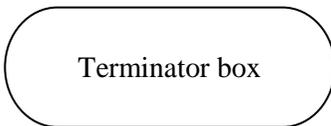
Pharmacist is required to perform an action



Pharmacist is required to make a decision which leads to different paths



Directs pharmacist to another step on another page

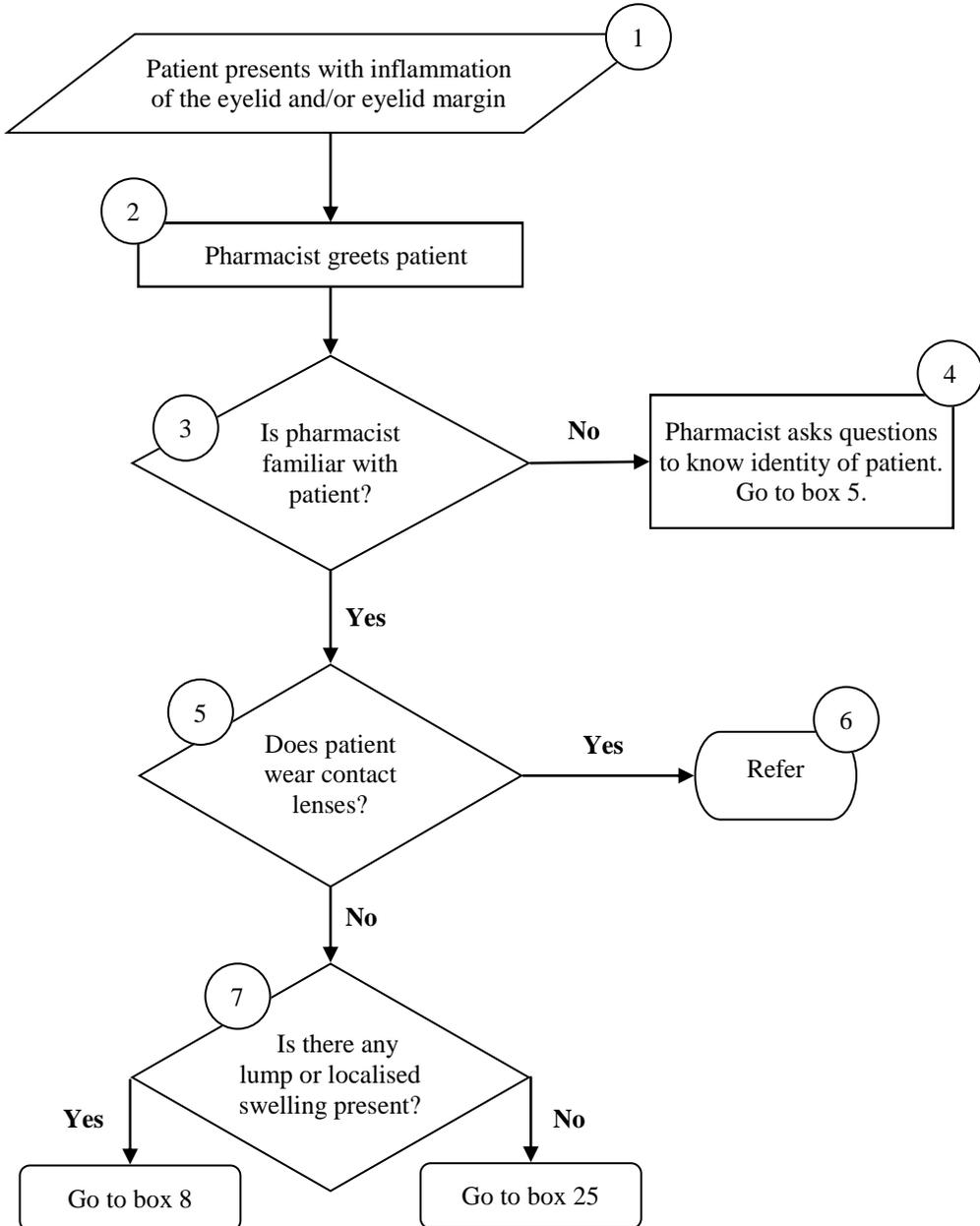


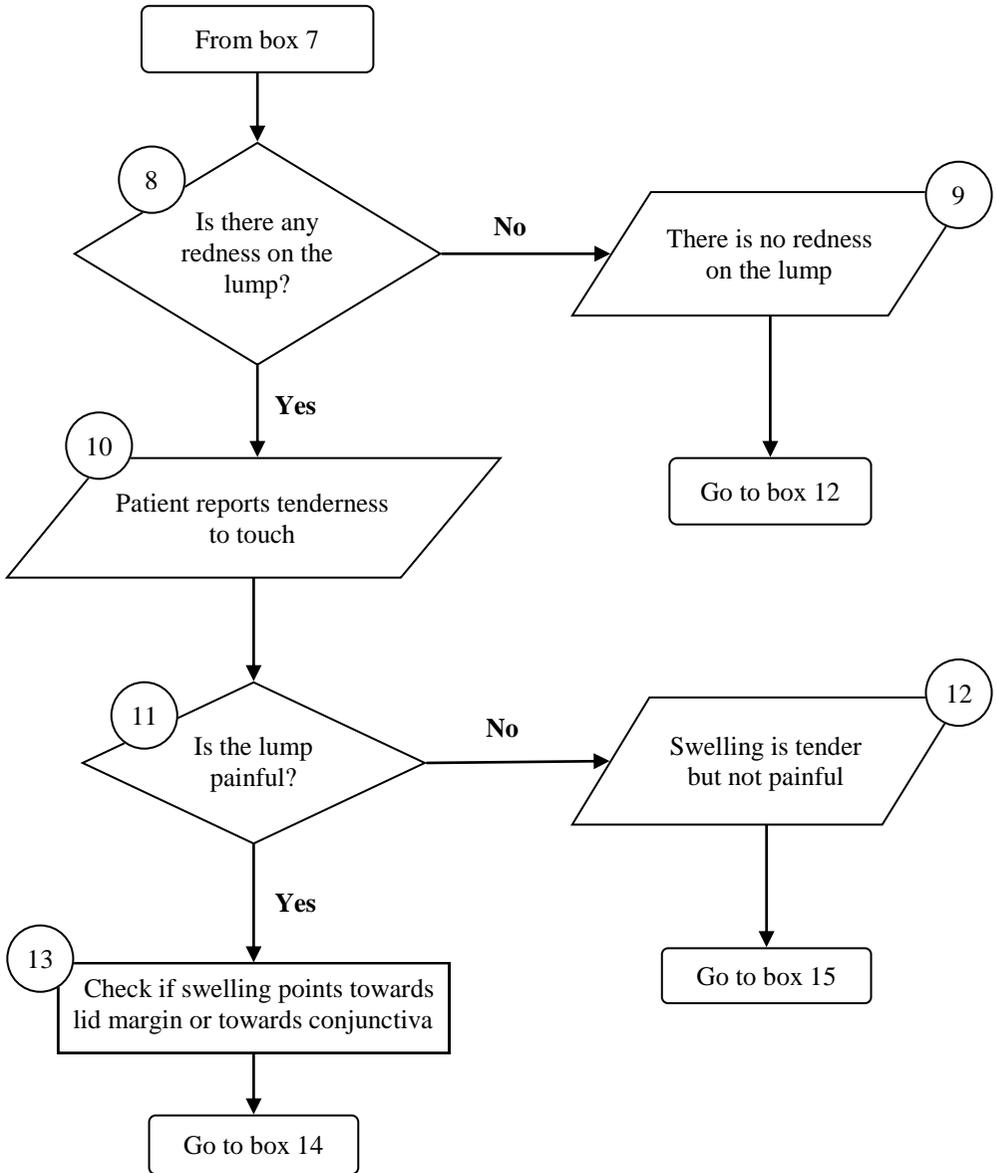
Pharmacist is required to perform an action and exit the protocol



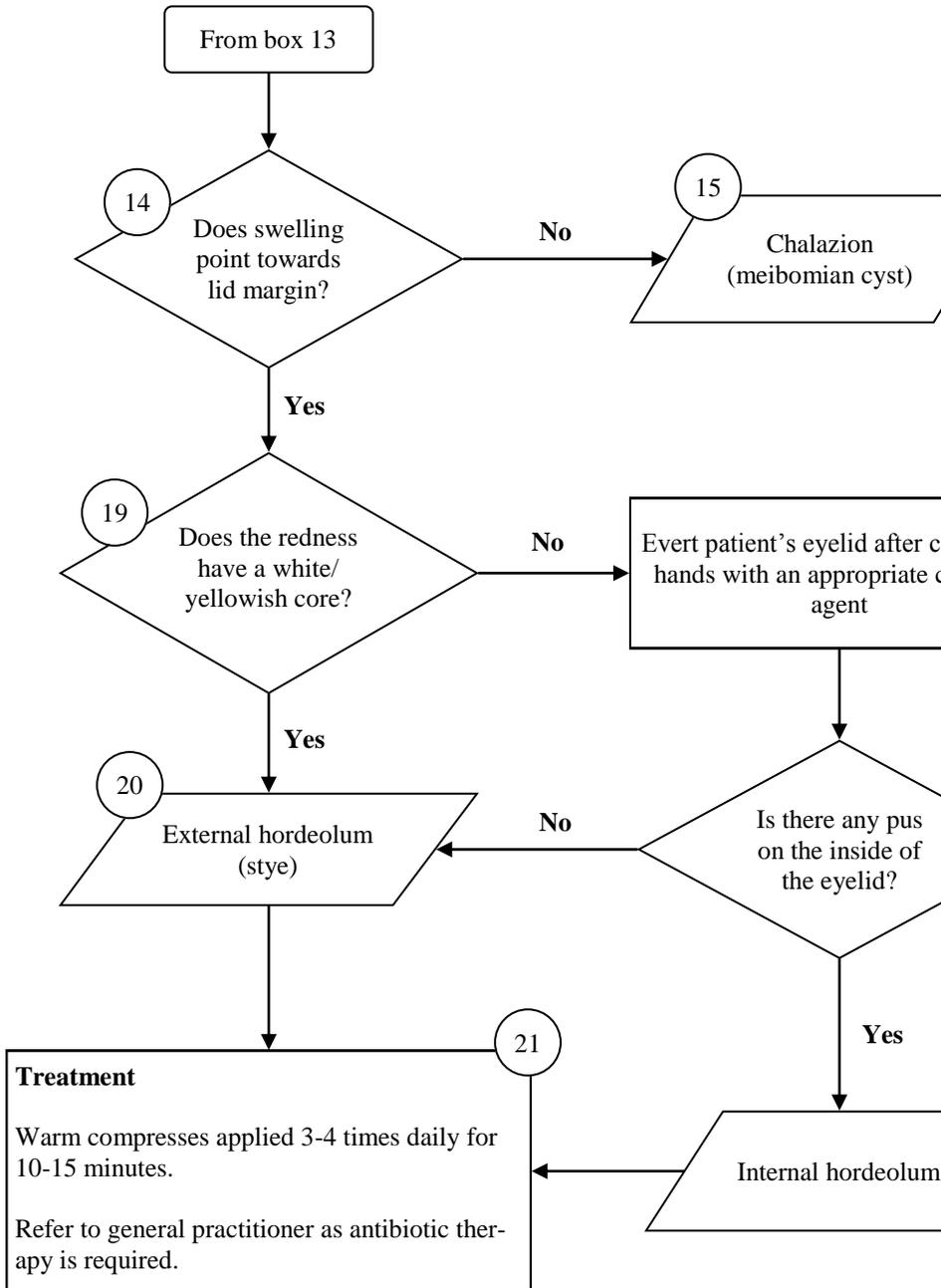
Step number label

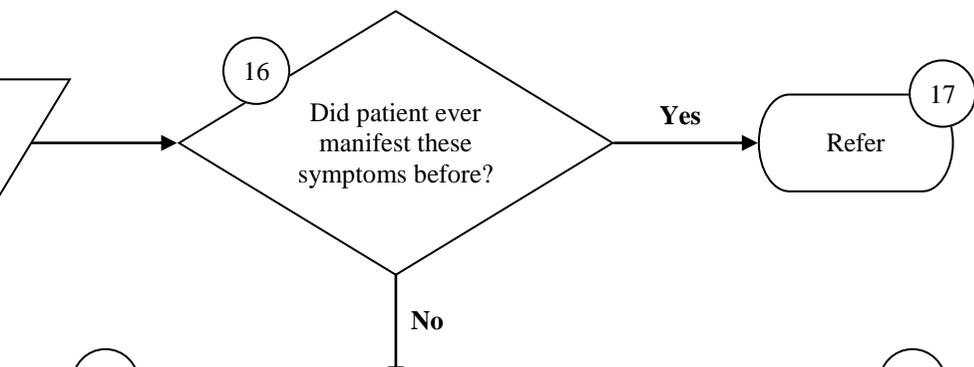
# EXTERNAL SEGMENT & EYELID CONDITIONS





# EXTERNAL SEGMENT & EYELID CONDITIONS





22  
cleaning  
cleaning

23

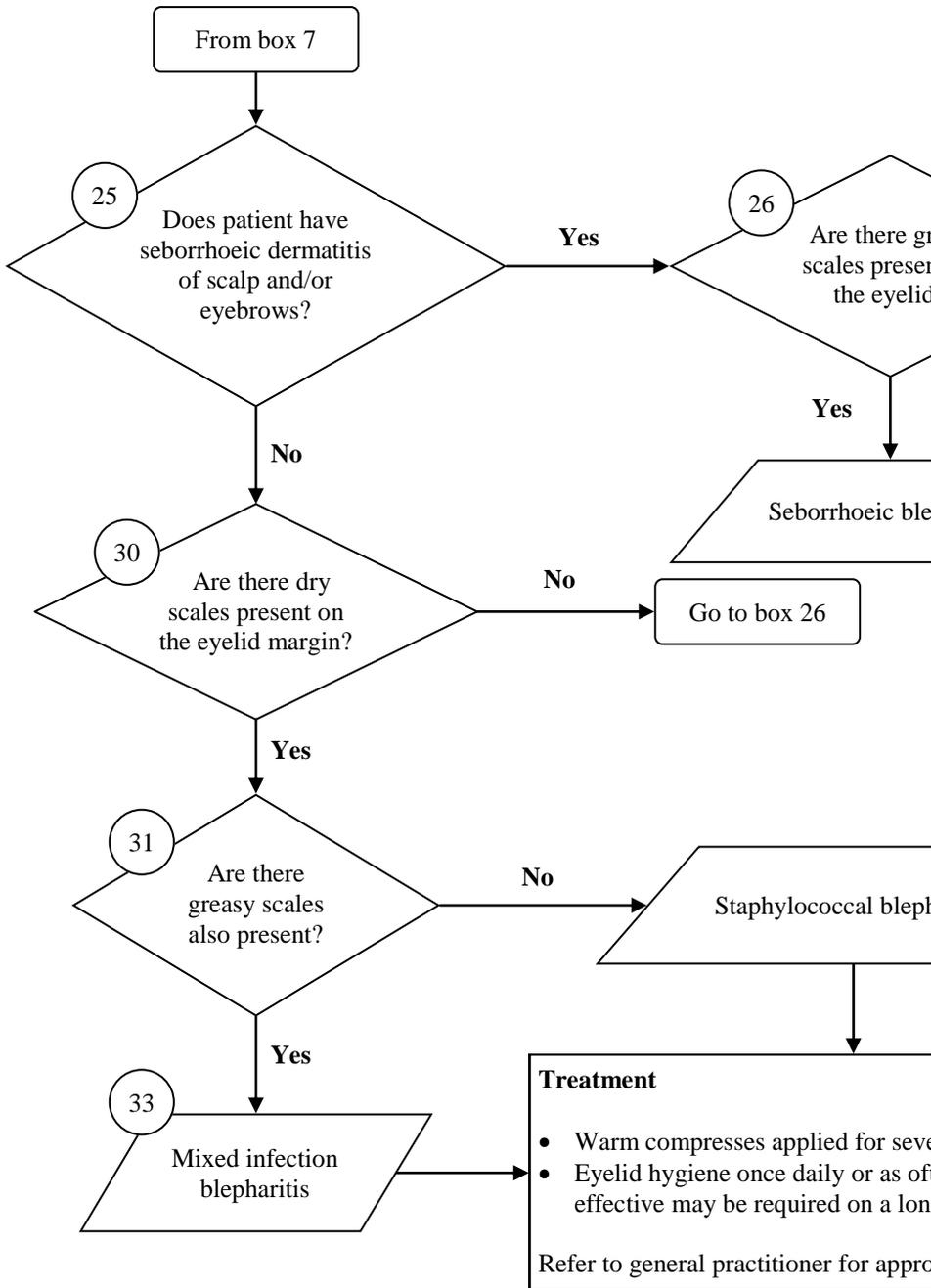
24

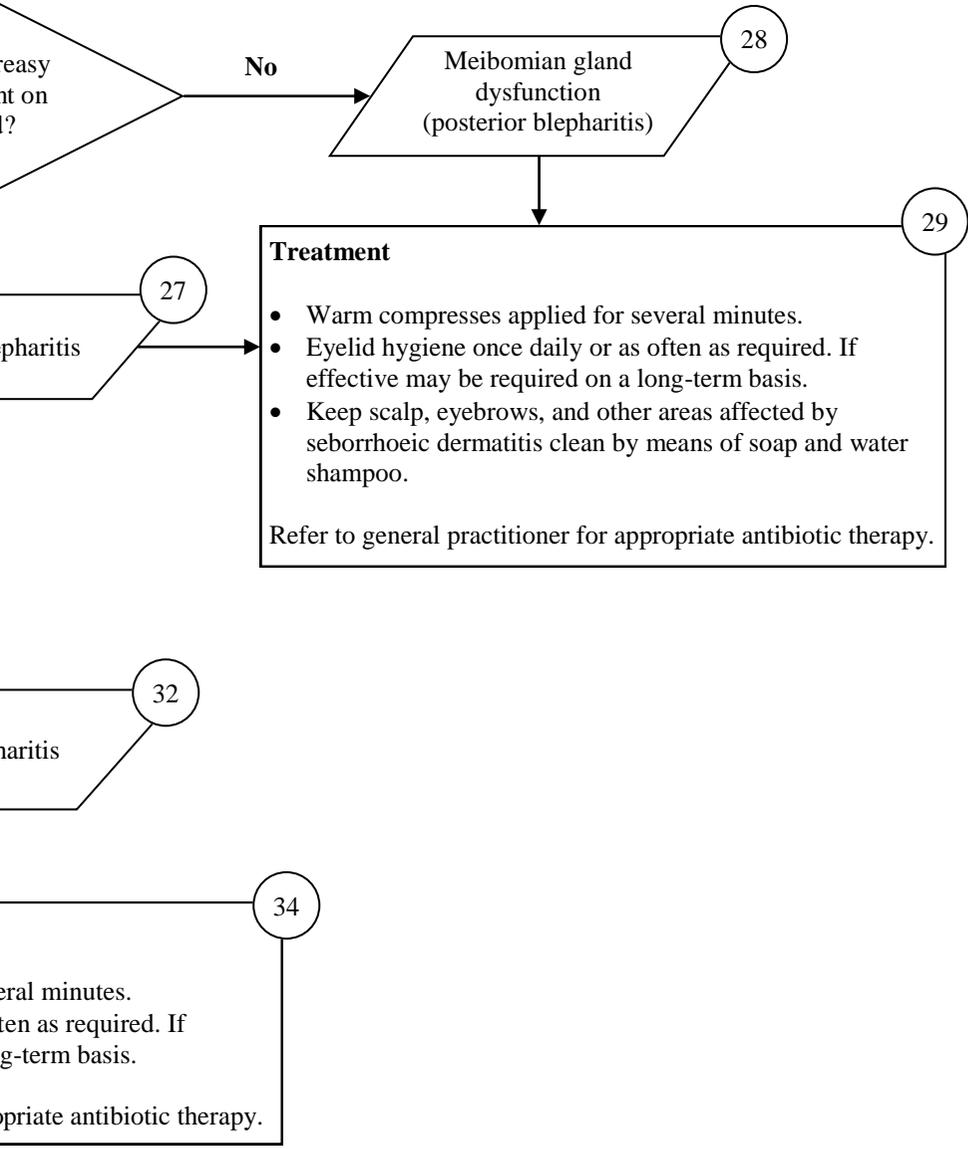
**Treatment**

Warm compresses applied twice daily for 3-5 minutes. The lesion should be massaged in the direction of the eyelashes with clean fingers or cotton tips.

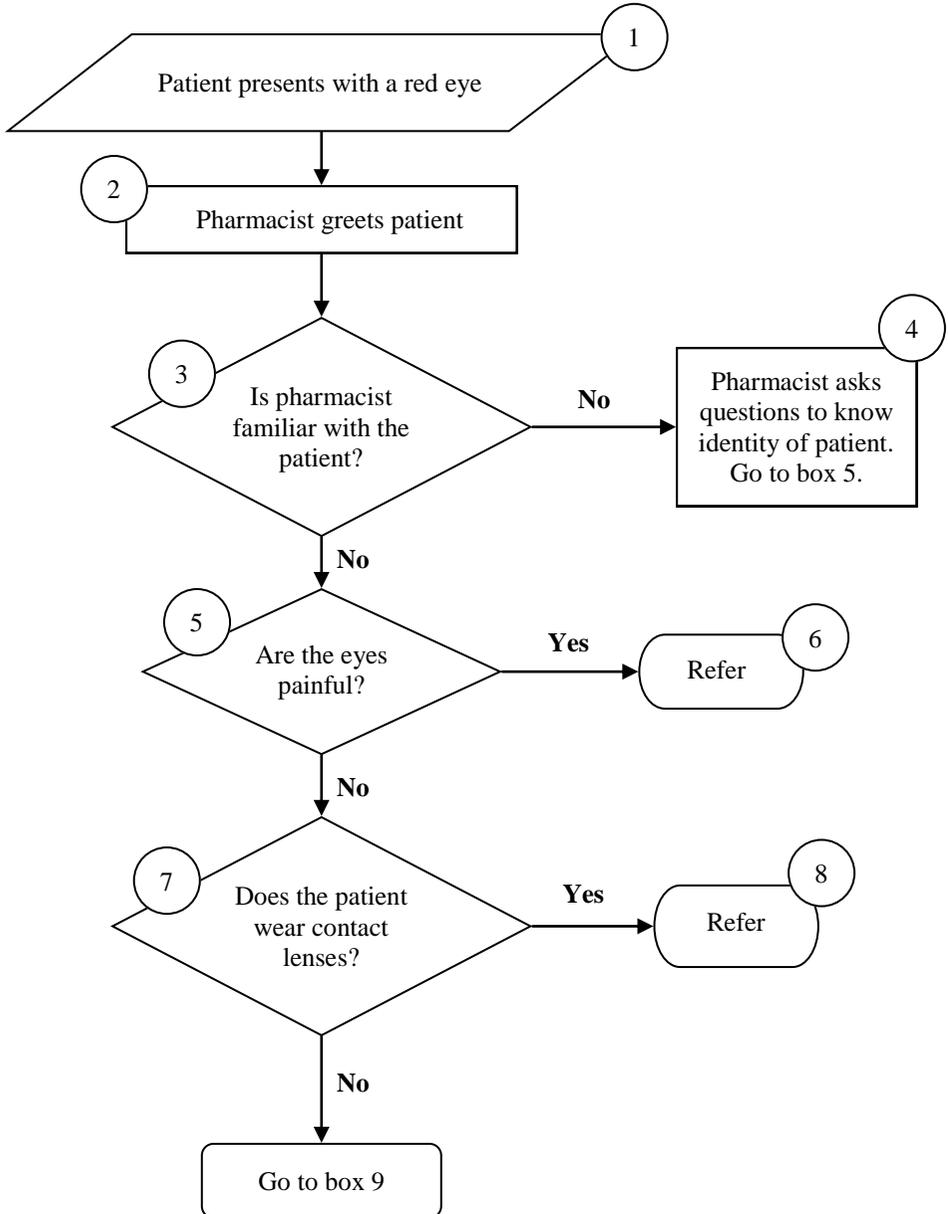
Refer to general practitioner if swelling does not subside or becomes red.

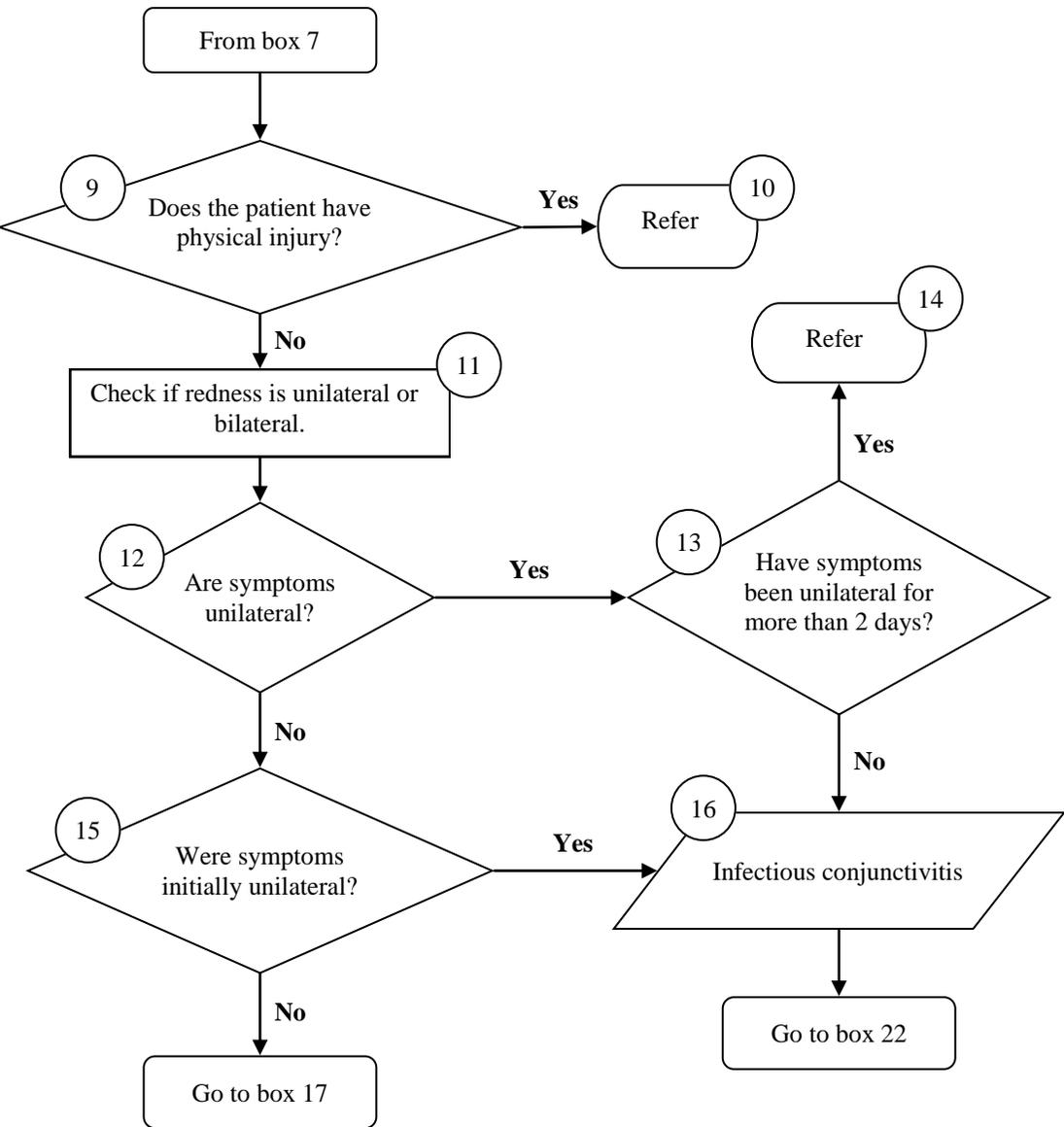
# EXTERNAL SEGMENT & EYELID CONDITIONS



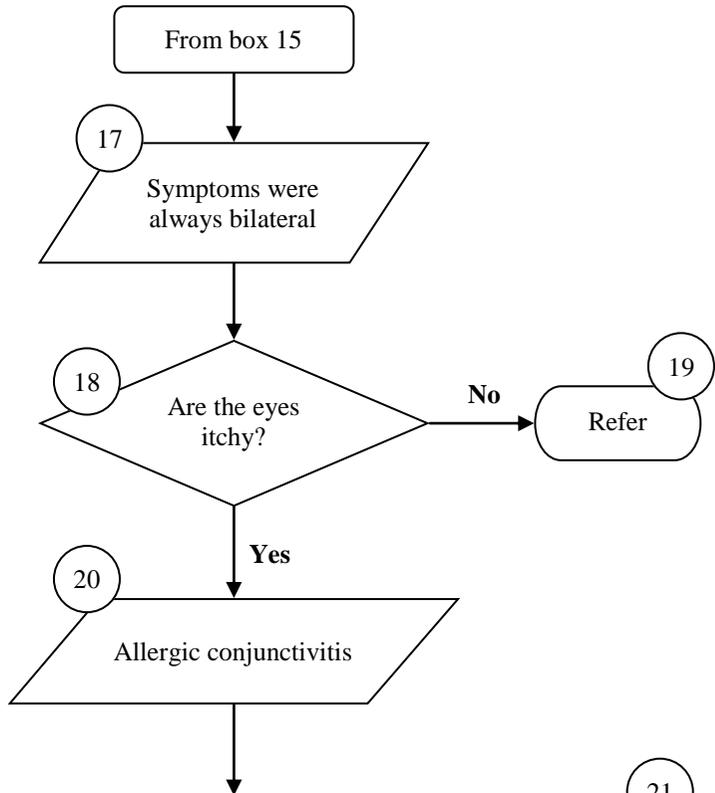


# CONJUNCTIVITIS





# CONJUNCTIVITIS



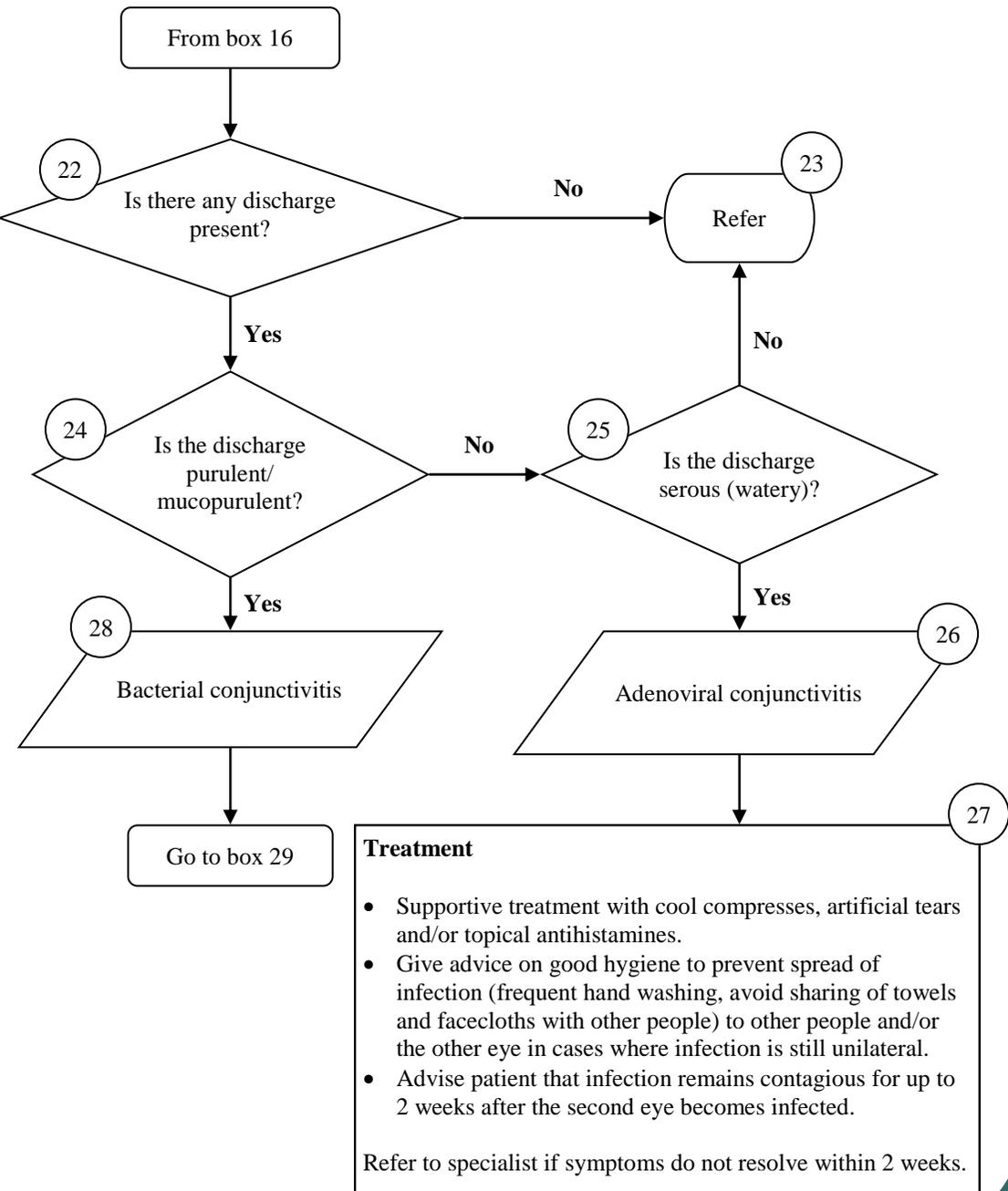
## Treatment

### Non-pharmacological advice:

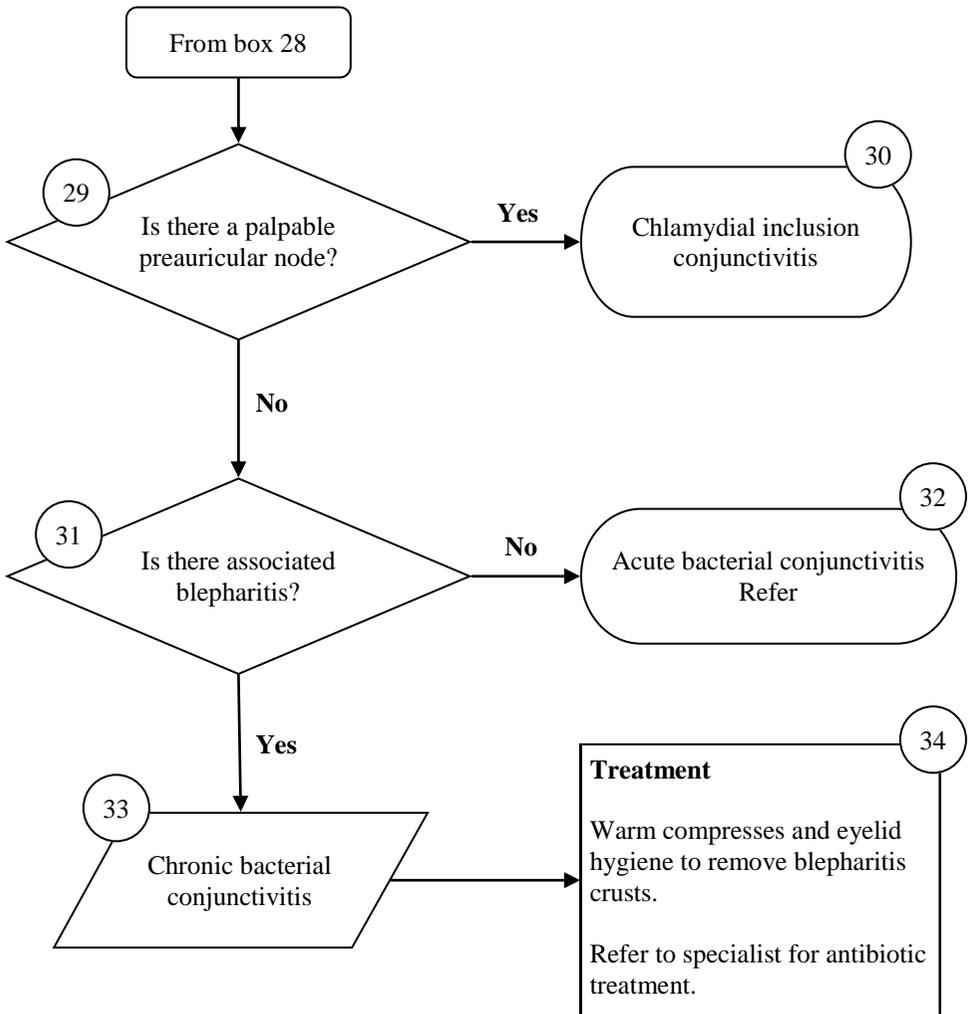
- Minimise exposure to allergens as much as possible
- Wash clothes and fabric frequently
- Shower/bathe before bedtime
- Cool compresses to alleviate itching and remove any dry crusts

### Pharmacological treatment:

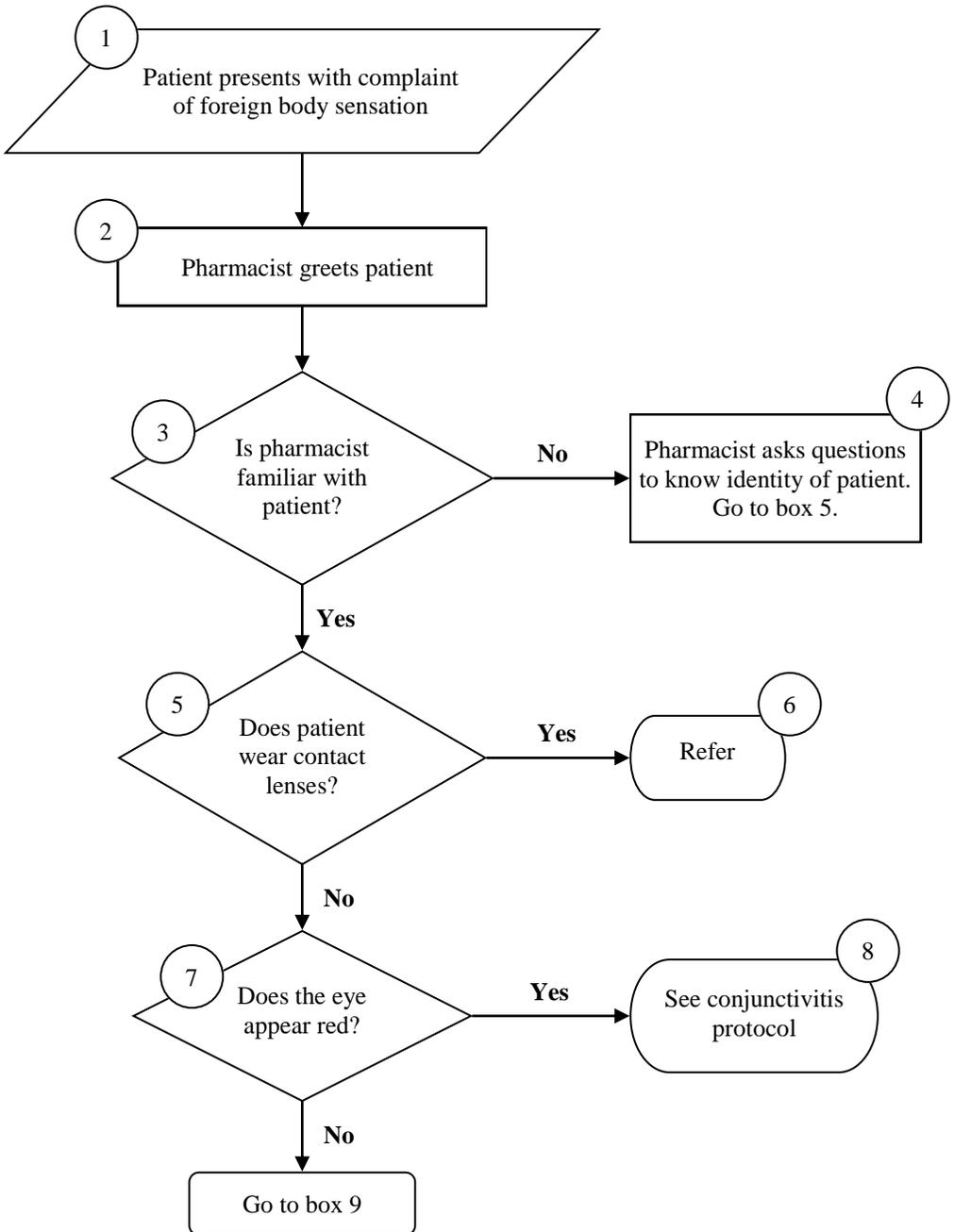
- Topical antihistamine/vasoconstrictor agent
- Topical histamine H1-receptor antagonist (levocabastine, emedastine)
- Artificial tears to dilute allergens (carboxymethyl cellulose, hydroxypropyl methylcellulose)
- For recurrent or persistent cases: mast cell stabilisers (sodium cromoglicate)



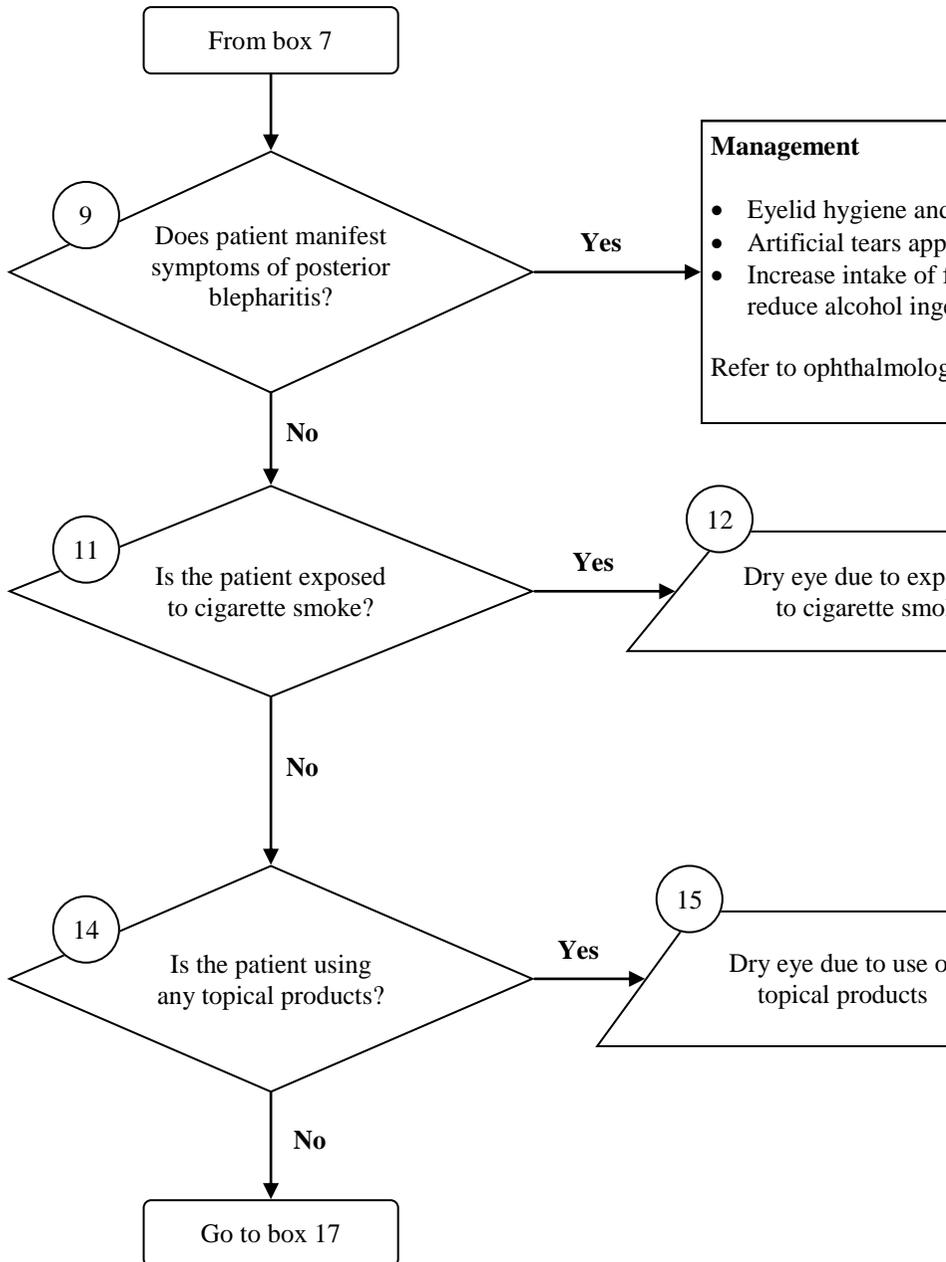
# CONJUNCTIVITIS



# DRY EYE DISEASE



# DRY EYE DISEASE



10

1. Warm compresses applied at least once daily.  
2. Artificial tears applied 3-4 times daily or as required.  
3. Diet of foods containing omega-3 fatty acids and vitamin A;  
4. Alcohol ingestion.  
5. If symptoms are not improved after one week.

13

**Management**

- Reduce exposure to cigarette smoke.
- Increase intake of foods containing omega-3 fatty acids and vitamin A; reduce alcohol ingestion.
- Artificial tears applied 3-4 times daily or as required.

16

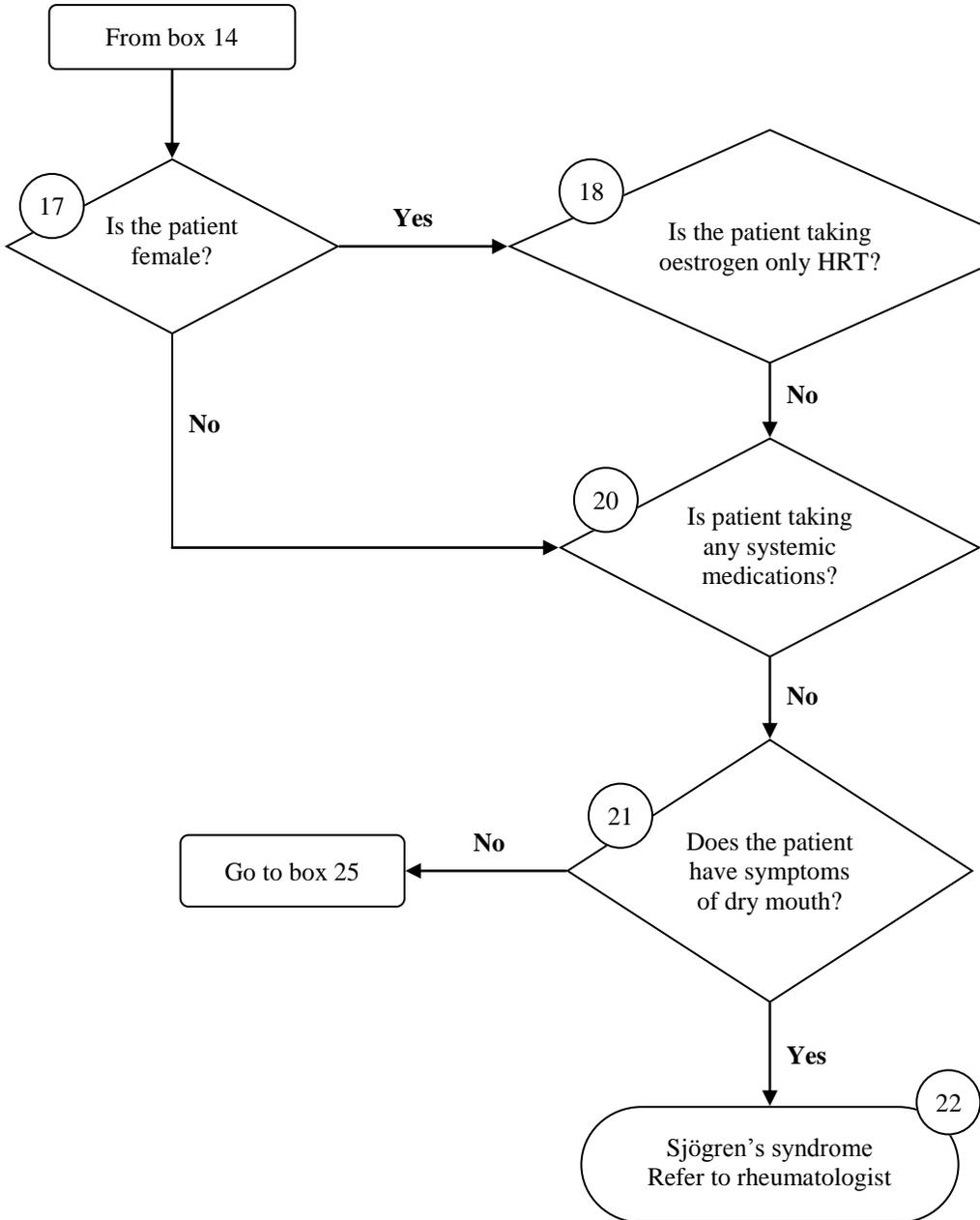
**Management**

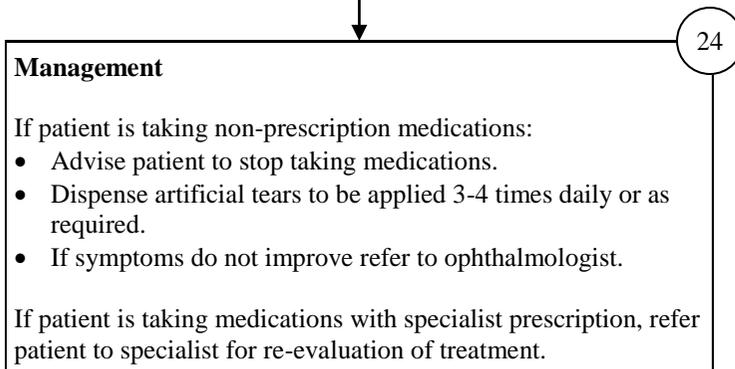
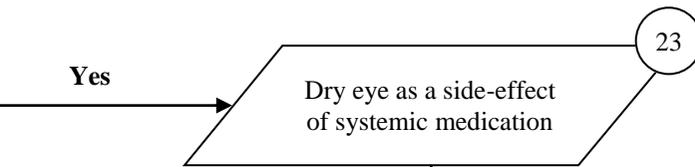
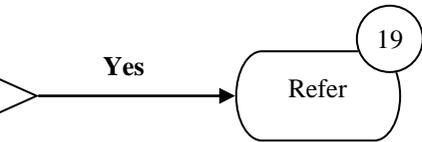
If patient is taking non-prescription medications:

- Advise patient to stop taking medication or suggest alternatives without preservatives.
- Dispense artificial tears to be applied 3-4 times daily or as required.
- Advise patient to wait 15 minutes before applying second product.

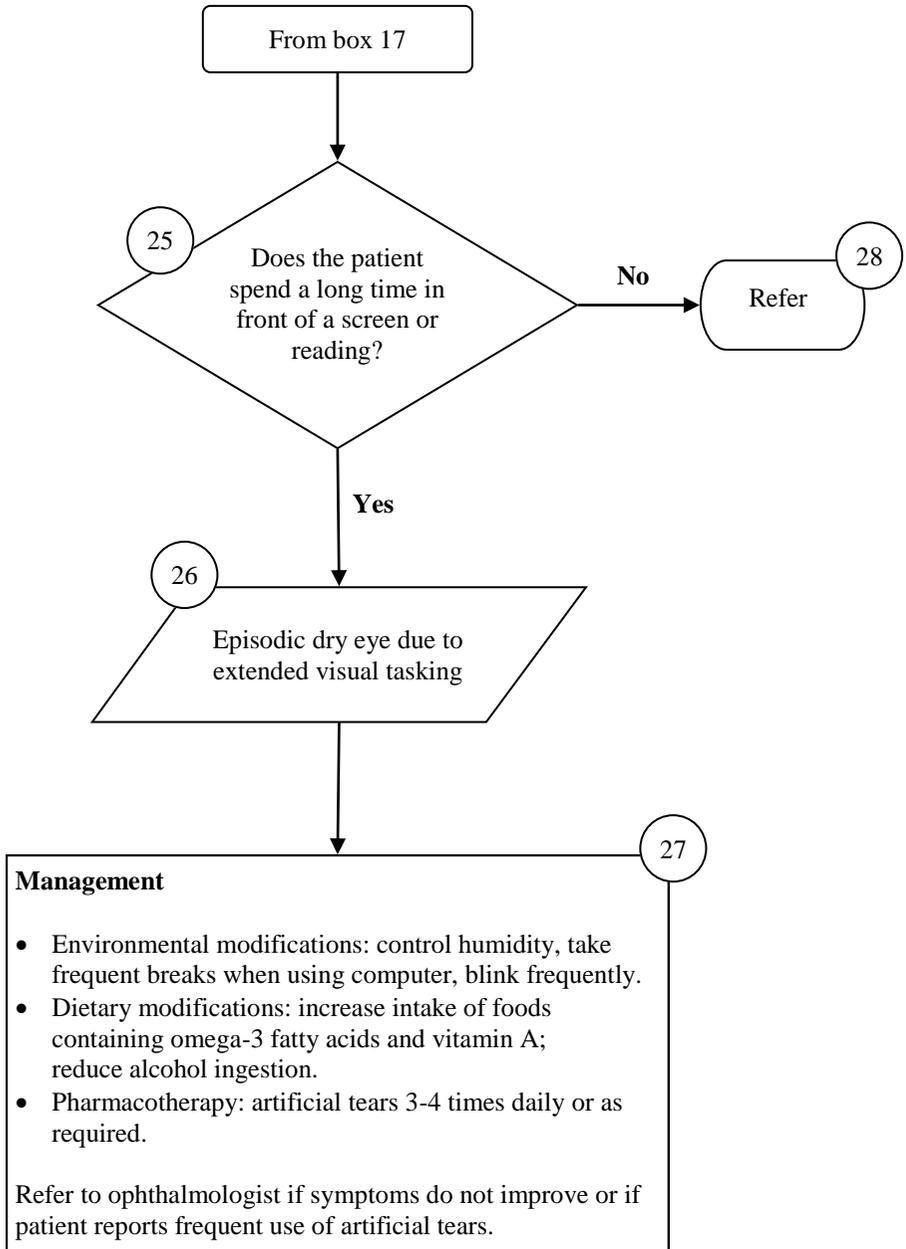
If patient is taking prescription medications, refer to ophthalmologist for re-evaluation of treatment.

# DRY EYE DISEASE





# DRY EYE DISEASE



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