



Blephasteam®

Eyelid warming device, moist heat technology

Innovation in Lid Margin and Ocular Surface Disorders
When eyelids require heat and moisture



CE 0459

Théa

Designed by Laboratoires Théa, a leading ophthalmic company specialised in lid care and working closely with eye care specialists





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> **Blephasteam[®]** is designed to relieve the symptoms of patients suffering from Meibomian Gland Dysfunction (MGD) and specifically obstructive MGD. MGD is frequently associated with diseases such as posterior blepharitis, meibomitis, chalazion, ocular rosacea, evaporative dry eye, contact lens intolerance...

> **Blephasteam[®]** is an innovative medical device which delivers, in standardised conditions, a latent heat therapy to unblock the Meibomian glands. This ocular environment naturally enhances tear quality by improving the thickness and quality of the lipid layer. These benefits provide on the ocular surface a better vision and comfort.

> **Blephasteam[®]** is easy to use and convenient for patients.

> **Blephasteam[®]** has been developed to conform to CE mark requirements.



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> Blepharitis

Blepharitis is the most common condition seen in the ophthalmologist's practice ⁽¹⁾. It is a common cause of eyelid inflammation, and causes irritation, itching of the eyelids, red eyes, and dandruff-like scales on eyelashes.

Blepharitis can be classified by the anatomic location: anterior blepharitis (affects the base of the eyelashes) and posterior blepharitis (affects the Meibomian glands and their duct orifices).

Blepharitis has traditionally been classified in subcategories as staphylococcal, seborrheic, Meibomian Gland Dysfunction (MGD), or a combination thereof ⁽²⁾.

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> Lids/Eyelids

Eyelids are a mucocutaneous layer covered with skin. Eyelids are composed of muscles which allow blinking, a tarsal part which controls their shape and contains glands like Meibomian glands and accessories lacrimal glands.

Eyelids play an important role in protecting ocular surface from damage.

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> Evaporative dry eye

Evaporative dry eye is due to excessive water loss from the exposed ocular surface in the presence of normal lacrimal secretory function.

Its causes have been described as intrinsic, affecting lid structures, or extrinsic, where ocular surface diseases occur due to some extrinsic exposure.

Meibomian glands and their excretion of lipids play an important function in the lipid layer thickness and the tear film integrity ⁽³⁾.

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> Prevalence

Meibomian Gland Dysfunction is widespread in the general population; several studies estimate the prevalence at 39% to 50% in general population ⁽⁴⁾.

This condition has been noted in nearly half of contact lens wearers. MGD is also prevalent in patients with dry eye and is associated with tear film instability.

MGD often occurs in conjunction with cutaneous disease and sebaceous gland disorders ⁽⁵⁾.

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> Heat

Meibum from subjects with MGD were observed to begin melting at 35°C, whereas meibum from normal subjects started to melt at 32°C⁽⁶⁾.

In MGD patients, it is important to warm the eyelids up to 40°C to ensure successful melting and outflow of obstructing meibum.

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> Air

Blephasteam® delivers latent and standardised heat and moist air around the eyelids which melt the obstructing meibum thereby, helping its evacuation through massaging and pressure. Blephasteam® has been studied and validated to ensure device safety.

Blepha**S**team

> Safety

Blephasteam® has been designed and developed to ensure efficacy and safety. All data meet CE requirements. The temperature of the eyelids never rises above 40°C.

Blephasteam® is considered as safe. None of experiments with human volunteers was reported as uncomfortable.

Blephas**t**eam

> Treatment

The treatment of MGD consists of eyelid hygiene, systemic antibiotics, topical antibiotics and steroids, as well as treatment of any dermatologic conditions ⁽¹⁾. It is essential to explain to the patient that the mainstay treatment is lid hygiene to unblock the glands and prevent them from blocking again as much as possible.

The first step in lid hygiene consists in increasing the flow of meibum by raising the temperature above its melting point. Blephasteam® is an innovative eyelid warming device which delivers latent heat therapy to rise the meibum temperature.

The second step consists of an eyelid massage in order to express the heated meibum. This is best done by means of rotary action of the fingers at the lid margin.

The last step consists of cleansing the eyelids to clear the lashes of oily secretions, bacterial flora and debris.

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> Efficacy

The efficacy of Blephasteam® was widely studied and validated ^(7, 8, 9):

Blephasteam® improves visual acuity in patients with MGD and increases tear film lipid layer thickness and ocular comfort in patients with dry eye symptoms with or without Sjögren syndrome.

Blephasteam® is well tolerated, very convenient and useful for patients with dry eye symptoms.

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> Acne Rosacea

Acne rosacea is a chronic skin disease characterised by persistent erythema, telangiectasis, papules, pustules, and sebaceous gland hypertrophy, preferentially affecting the convexities of the face.

The Meibomian glands are affected by the disease process itself, as they are modified sebaceous glands ⁽¹⁾. Rosacea may involve the eye with a prevalence of 3% to 58% ⁽¹⁰⁾ and the prevalence of ocular complaints in patient with acne rosacea is estimated between 45% and 85% of cases ⁽¹¹⁾.

It was reported that in patients with a subset of MGD called primary (diffuse) meibomitis, 74% had a seborrheic dermatitis and 51% had rosacea (acne rosacea) ⁽²⁾.

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> Meibomian Gland Dysfunction

MGD is common and is an important form of posterior blepharitis. Usually, patients suffering from MGD complain about dry eye-like symptoms such as burning and irritation sensations and decreased vision.

In practice, examination of the lids shows a Meibomian gland obstruction and/or a production of abnormal secretion. Pressure applied to the lid margin results in either no expression of fluid or expression of turbid, foamy, or solidified excreta.

Telangiectasia and pouting of the orifices is frequently seen. The lids may be thickened and erythematous ⁽¹⁾.





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When eyelids require heat and moisture

The first eyelid warming treatment

which achieves a standardised moist and heat therapy with real efficacy

Blephasteam® delivers an adequate temperature and moisture to melt Meibomian secretions and obstruction.

- > Both convenient and comfortable
- > Just a 10-minute use
- > Enables clear vision during the session, no mist



WBST LEX 05 10 - création : (AGREESTUDIO)

A safe technology for your patients' eyelids

For more information: www.blephasteam.com

LABORATOIRES THÉA - 12 RUE LOUIS BLÉRIOT ZI DU BRÉZET
63017 CLERMONT-FERRAND CEDEX 2

 **Théa**
Leading Independent Ophthalmic Group