

## Glaucoma patient information booklet

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# Understand more about **PAPS** in long-term glaucoma management

Glaucoma is a chronic condition. It is, therefore, **important to continue with your treatment plan**, as advised by your eye doctor.<sup>1</sup>

One factor that can significantly impact treatment outcomes is side effects to medication. In glaucoma, this can include **Prostaglandin-Associated Periorbitopathy Syndrome** – also known as **PAPS**.<sup>2-5</sup>

To support you on your glaucoma treatment journey, this information booklet will help you recognize the signs and symptoms of PAPS, provide essential information, and offer simple tips to help reduce the impact of PAPS.

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If you've been diagnosed with glaucoma, you may need to take medicines. Nowadays, there is a variety of different glaucoma treatment options to help, and by **proactively engaging with doctors in the management of the condition, glaucoma can be well controlled.**<sup>1</sup>



## Acknowledgements

This booklet was developed in collaboration with leading experts in glaucoma.

Special thanks to Dr Fang Seng Kheong (International Specialist Eye Centre, Kuala Lumpur, Malaysia), Prof. Makoto Aihara (University of Tokyo, Japan), and Prof. Ki Ho Park (Seoul National University, Korea).

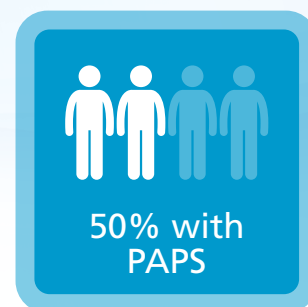
All patient images were granted permission for use and informed consent was obtained from patients. All information and images included in the booklet were provided, reviewed, and validated by a wider panel of doctors: Dr Grace D. Grozman (Philippines), Dr Gan Eng Hui (Malaysia), Dr Jin Wook Jeong (Korea), Dr Weerawat Kiddee (Thailand), Prof. Hae-Young Lopilly Park (Korea), Dr Harsha Rao (India), Dr Chien-Chia Su (Taiwan), Dr Yanin Suwan (Thailand), Dr Jayant Venkatramani Iyer (Singapore), and Dr Jasper Wong (Hong Kong SAR).

# Prostaglandin analogues (PGAs) and PAPS

A common choice for the treatment of glaucoma is a group of medicines called **prostaglandin analogues (PGAs)**. You may be prescribed **bimatoprost, latanoprost, tafluprost, or travoprost**. They are typically chosen because of their effectiveness in lowering pressure in the eye and their easy once-a-day regimens.<sup>6,7</sup>



However, as with most medicines, they may be associated with a set of side effects. In this case, they are collectively known as **PAPS**, or prostaglandin-associated periorbitopathy syndrome.<sup>3-6,8</sup>



PAPS is actually very common in individuals who are using PGAs. In fact, about **50% of individuals who use PGA eye drops may experience PAPS** after using them for more than 1 month.<sup>3,5,9</sup>

## What is PAPS?

**PAPS** is a term used to describe a **collection of visible changes that occur around the eye**, including the eyelids, typically following the use of glaucoma eye drops – PGAs.<sup>3-5</sup>

# The classical signs of PAPS



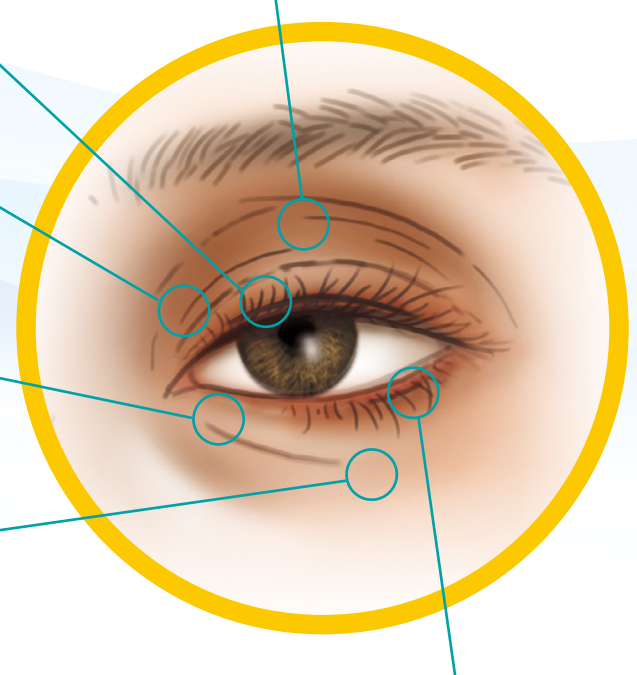
1. Sunken eyes or deepening of the upper eyelid 'sulcus' (aka DUES)<sup>3-5,11</sup>

2. Excessive eyelash growth<sup>3,6,10</sup>

3. Droopy (or 'floppy') upper eyelid<sup>3-5,11</sup>

4. Darkening of the skin around the eyes or eyelids<sup>3,6,10</sup>

5. Flattening of the lower eyelid bags (aka FLEB), and/or fat loss around the eye<sup>3-5,11</sup>



6. Eyelids pressing firmly against the eye<sup>3,4</sup>

## PAPS can often be underreported and underdiagnosed

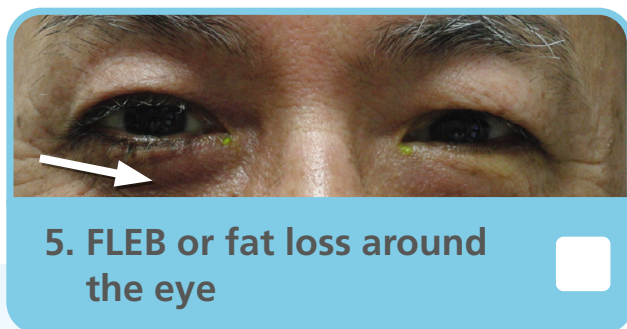
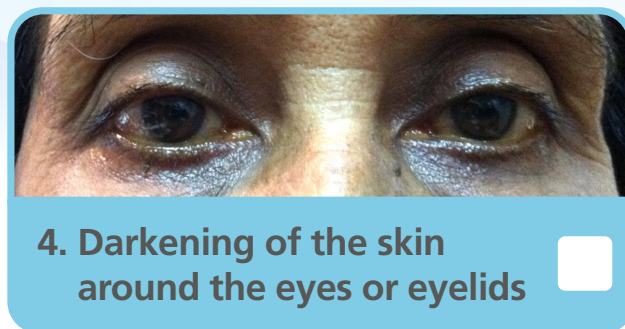
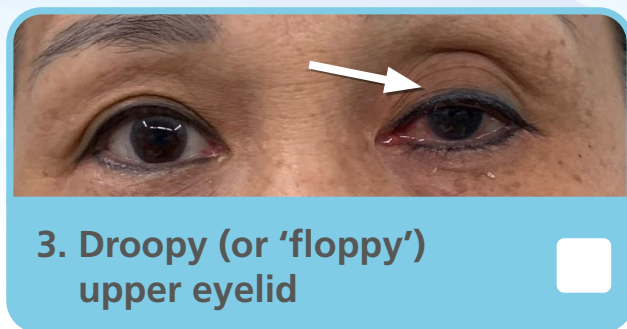
A recent survey showed that **60%** of individuals were conscious of the adverse cosmetic changes associated with PAPS, **but around 80%** did not raise these concerns with their physicians.<sup>12</sup>

Tell your doctor

# How to identify PAPS

Use our checklist below to monitor your glaucoma treatment journey

Tick the box(es) if you notice any of the following changes in your eye appearance.



Please talk to your eye doctor if you have experienced any of the above changes around your eyes.

Images provided by the N-GEN council, a group of leading experts in glaucoma. All images were granted permission for use, and informed consent was obtained from the patients.

# The impact of PAPS

PAPS can affect an individual's quality of life and overall treatment outcomes.<sup>8,13,14</sup>

## Impact on quality of life:

Some individuals with PAPS reported the following:<sup>12</sup>



Feeling gloomy



Avoiding looking in the mirror



Lacking confidence to socialize



Interference with work

## Impact on treatment outcomes:



Beyond the cosmetic changes, PAPS can also have a negative impact on treatment outcomes, including:

- **Unreliable eye pressure measurements.**<sup>15</sup>
- Added difficulty and **poor outcomes related to glaucoma surgery** in the future.<sup>16,17</sup>



Please share your concerns with your eye doctor as soon as they arise so we can work on a solution together.

# What can you do?\*



## 1. Schedule regular visits with your eye doctor

- It is important to **visit your eye doctor regularly**, and tell them if you notice any cosmetic changes or other troublesome symptoms.



## 2. Wash your face and eyelids carefully with water after using PGA eye drops

- It is possible that washing your face immediately after using your eye drops could prevent them from being absorbed properly. But, washing too late could cause them to absorb into your skin, causing pigmentation. **Please talk to your eye doctor if you have any questions about this.**



## 3. Take care when using tissue paper to wipe around your eyes

- Using tissue paper to clean around your eye could further spread the eye drops causing the skin around your eyes or on your eyelids to darken.<sup>13</sup>
- **Please talk to your eye doctor** for recommendations, especially if you begin to observe any darkening of the skin.



## 4. Follow your treatment plan as directed by your eye doctor

- If appropriate, you may be recommended to switch to an alternative eye drop therapy.<sup>18,19</sup> There are a variety of options available to meet your specific needs, without compromising on treatment outcomes.

\*Note: The information presented is based on expert opinion. Any decisions made by your doctor will be on an individual basis and consider the benefits and risks of treatment, and convenience to you.

# Wishing you to continue treatment without compromising quality of life

For many individuals, being diagnosed with glaucoma can cause anxiety or be frustrating. However, it is important to remember that being diagnosed with glaucoma is not the end of a healthy and independent life – rather, it should be seen as an **opportunity to take better care of ourselves**.

We hope this patient information booklet will help you understand more about PAPS and support you on your glaucoma management journey.

**Talk to your doctor if you have any concerns about PAPS.**

Scan here to learn more about PAPS in our patient video:



OR CLICK HERE

## References

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