

## The referral process

Referral is not simple for the patient. Many live in rural areas and referral means travelling long distances to a large urban eye unit that they have never been to before, incurring considerable expenses. These are barriers to the referral process and need to be considered.

In your referral letter, document your findings, including baseline measurements, initial treatment and reason for referral, and then contact the referral centre about the patient. Prior notice also helps the referral centre to prepare the necessary items such as agar plates.

Patients must feel supported and need to know that someone will be expecting them. This might mean giving them a phone number to call when they arrive.

Explain the purpose and urgency of the referral in order to ensure that the patient attends. Microbial keratitis, especially fungal infections, tend to resolve slowly, and counselling helps to manage patients' expectations and keep them hopeful.

## How you can be prepared

- Equip your health facility with a torch, fluorescein strips and broad-spectrum antibiotics

- Ensure that the details of the nearest referral centre are clearly written down, where everyone can see it
- Ensure that everyone in the team knows how to prepare broad-spectrum antibiotics and has access to printed instructions for doing so
- Print out a decision-making guide and referral checklist and display these in your clinic.

### Referral checklist

- Baseline examination, including visual acuity, done and recorded
- Initial treatment started and documented in detail
- Reason for referral documented clearly and communicated to the patient
- Patient understands the expected healing prognosis and timeframe
- Referral centre contacted
- Patient knows when the referral centre is open and is given clear directions
- Patient is given the phone number of the coordinator at the referral centre to call once they arrive so that they are seen urgently.

## References

- 1 Upadhyay MP, Srinivasan M, Whitcher JP. Diagnosing and managing microbial keratitis. *Community eye health.* 2015;28(89):3.
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- 3 Upadhyay MP, Srinivasan M, Whitcher JP. Managing corneal disease: focus on suppurative keratitis. *Community eye health.* 2009;22(71):39

# How to make fluorescein strips



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Fluorescein strips are an essential diagnostic tool in eye care. They are useful for performing a number of procedures, such as measuring intraocular pressure, assessing dry eye and detecting corneal abrasions. Unfortunately, this basic item is not commonly available in many resource-limited settings. Here we describe how we make fluorescein strips at Mbarara University and Regional Referral Hospital Eye Centre.

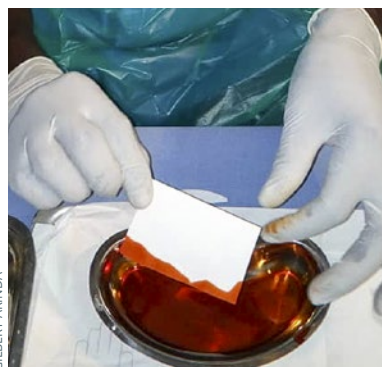
## What you will need

- Sterile filter paper (e.g., Whatman no. 1)
- A sterile bowl, such as a kidney dish
- Fluorescein sodium powder (20g)
- Distilled sterile water (100ml)
- A pair of scissors
- Empty injectable vials or any other small, sealed containers
- A sterile surface
- Sterile gloves, mask and apron.

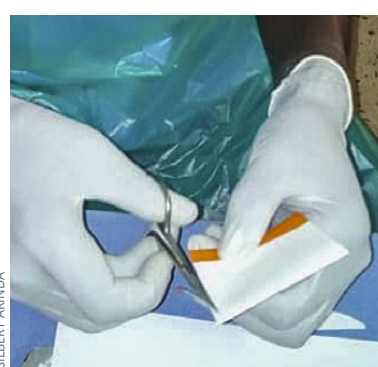
## Procedure

- Assemble all the materials on a clean tray
- Put on sterile gloves, mask and apron
- Prepare a 20% fluorescein solution by dissolving 20g of fluorescein sodium powder in 100ml distilled, sterile water
- Cut the filter paper into rectangles of approximately 5 cm wide and 8–10cm long
- Pour a small amount of fluorescein solution into the bowl. Be careful not to spill, as fluorescein leaves stains
- Dip the long edge of the filter paper in the fluorescein solution and immediately remove it, as the solution spreads very quickly through the paper (Figure 1)
- Place the dipped filter papers onto a sterile surface to dry
- Once they are dry, use a pair of scissors to cut the paper into strips, with the dipped edge at one end (Figure 2)
- Store the strips in a sterile, sealed container (Figure 3).

**Figure 1** Dip the long edge of the filter paper rectangle in the fluorescein solution



**Figure 2** Cut the paper into strips with the dipped edge at one end



**Figure 3** Store the strips in a sterile, sealed container

