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DIABETIC MACULA EDEMA (DME)

Guidelines Quick Reference 2014

Developed by the
DME Steering Committee from:



MINISTRY OF HEALTH
MALAYSIA



MINISTRY OF HEALTH
MALAYSIA

Guidelines for Managing Diabetic Macular Edema (DME)

▶ Central involved DME with vision impairment	<ul style="list-style-type: none"> • Ideally, licensed anti-VEGF (ranibizumab) with proven efficacy & safety is administered; role of bevacizumab with respect to efficacy and systemic as well as ocular safety remains controversial • If anti-VEGF not available, then focal/ grid laser
▶ Central-involved DME with very good vision, (3 options at this time, with community equipoise regarding best management)	<ul style="list-style-type: none"> • Observation until vision impairment, then either focal/ grid laser or anti-VEGF therapy if DME persists • Focal/ grid laser until vision impairment, then anti-VEGF therapy if DME persists
▶ Non-central involved DME	<ul style="list-style-type: none"> • Observation until central-involved DME, then see above Focal/ grid laser in selected cases where observation is judged to be inferior, such as during pregnancy or rapidly worsening cataract, or edema rapidly extending towards the center of the macula

*VEGF-Trap may have a future role in the treatment of DME. However, currently FDA & EMEA approval for VEGF-Trap to treat DME has not been obtained.

How to apply the best of focal/ Grid laser

- Typically laser is applied only to thickened areas of retina, with direct treatment to microaneurysms within thickened areas and grid treatment to other thickened areas without microaneurysms that have not been treated previously
- Focal/ grid laser generally should be repeated as often as every 3-4 months if edema persists or is not improving while giving anti-VEGF therapy (if available) (as long as it is believed that additional laser may be of benefit)

How to apply anti-VEGF therapy:

Improving: After initiating therapy, if improving on OCT or VA after injection, inject again (improving = OCT central subfield thickness decreased by $\geq 10\%$ or VA letter score improved by ≥ 5 letters, or ~ 1 line).

Stable: Not improving or worsening on OCT or VA: Sometimes inject, sometimes withhold injection

- ▶ If only stable since the last injection → Inject at least one more time to be confident that both OCT and VA are stable and not improving
- ▶ If stable for at least 2 consecutive injections:
 - If OCT CSF (Stratus equivalent) $< 250 \mu\text{m}$ and VA 20/20 or better → Defer injection, return in 4 weeks; if stable or improve, double follow-up to 8 weeks; if still stable or improve, double follow-up to 16 weeks; if worsen (see below), inject
 - OCT CSF $\geq 250 \mu\text{m}$ or VA worse than 20/20:
 - If less than 6 months of injections → Inject
 - If ≥ 6 months of injections → Defer injection
 - Consider focal/ grid laser if OCT CSF (Stratus equivalent) $> 250 \mu\text{m}$
 - Return in 4 weeks
 - ❖ If stable or improve, double follow-up to 8 weeks; if still stable, double follow-up to 16 weeks
 - ❖ If worsen, inject (see below)

Worsening: After withholding injection, when stable, if worsening on OCT or VA, resume injections (worsening = OCT central subfield thickness increased by $> 10\%$ or visual acuity letter score decreased by > 5 letters, or ~ 1 line)