



HEALTH HOLDING

HAFER ALBATIN HEALTH  
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CHILDREN HOSPITAL

<b>Department:</b>	Neonatal Intensive Care Unit (NICU)		
<b>Document:</b>	Departmental Policy and Procedure		
<b>Title:</b>	Treatment of Retinopathy of Prematurity (Anti-VEGF Therapy)		
<b>Applies To:</b>	All NICU Staff		
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## 1. PURPOSE:

1.1 To prevent visual impairment.

## 2. POLICY:

2.1 ROP: Retinopathy of Prematurity

## 3. PROCEDURES:

### 3.1 ROP Treatment:

- 3.1.1 Retinal findings requiring ablative treatment should be given according to the early treatment for retinopathy of prematurity randomized trial study.
- 3.1.2 Treatment may also be initiated for the following retinal findings:
  - 3.1.2.1 Zone I ROP: any stage with plus disease
  - 3.1.2.2 Zone I ROP: stage 3 – no plus disease
  - 3.1.2.3 Zone II ROP: stage 2 or 3 with plus disease
- 3.1.3 Treatment should generally be accomplished, when possible, within 22 hours of determination of treatable disease to minimize the risk of retinal detachment.
- 3.1.4 Babies with aggressive posterior ROP should be treated as soon as possible and preferably within 48 hours. ROP requiring treatment but which is not aggressive posterior ROP should normally be treated within 48-72 hours.
- 3.1.5 Transpupillary diode laser therapy is recommended as the first line of treatment of ROP.
- 3.1.6 Treatment with near-confluent laser burns should be administered to the entire avascular retina.
- 3.1.7 The unavailability of diode laser equipment or the inability to transfer the preterm neonate to another center should not prevent or delay the treatment of ROP. In these situations, treatment with argon laser, cryotherapy or intravitreal anti-VEGF may be completed an ophthalmologist experienced with these techniques.
- 3.1.8 Solo treatment with antivascular endothelial growth factor (anti-VEGF) should only be done under record protocols. However, anti VEGF therapy is the recent development in the treatment of ROP.

### 3.2 Post Treatment of ROP:

- 3.2.1 The first post-operative examination should take place 5-7 days after treatment and should be continued weekly for signs of decreasing activity and regression.
- 3.2.2 Retreatment or seeking another opinion should be done 10-14 days after initial treatment when there has been a failure of the ROP to regress. In Anti-VEGF treated patients follow up examination should continue for at least 6 months.
- 3.2.3 After the acute phase, eyes that have reached stage 3 or have been treated should be monitored at a frequency dictated by clinical condition to determine sequelae.

#### **4. PROCEDURE:**

- 4.1 Pupil dilation should be done using phenylephrine 2.5% and Mydriacyl 1% drop.
- 4.2 Feeding should be discontinued 2 hours before and after the procedure as part of aspiration precaution.
- 4.3 Infants should be closely monitored for bradycardia, apnea, tachycardia after dilation and during procedure.
- 4.4 Prepare the materials/equipment needed, anti-VEGF injection and dropligel.
- 4.5 Sterile technique should be observed. Put drape on the site.
- 4.6 Disinfect the site with ROP. Start treatment always on the right part of the eye then to the left eye respectively using Povidone 1% the normal saline. Use alcome drops as local anesthesia.
- 4.7 Retract the eyelid of the patient.
- 4.7 Experience Ophthalmologist will measure the site of injection with the use of caliber.
- 4.8 Injection of anti-VEGF, then cotton tip applied on the site.
- 4.9 Disinfect again the site with the use of povidone 5% and normal saline.
- 4.10 After the procedure use Vigamox eye drops 6 hourly for one week.
- 4.11 To observe the eye for discoloration or bleeding and to inform immediately.

#### **5. MATERIALS & EQUIPMENT:**

- 5.1 Caliber
- 5.2 Eye retractor
- 5.3 Iris forcep
- 5.4 Povidone 5%
- 5.5 Normal saline
- 5.6 Sterile drape
- 5.7 Sterile gloves
- 5.8 Sterile gauze
- 5.9 Cotton tip
- 5.10 Ophthalmoscope
- 5.11 Anti-VEGF injection
- 5.12 Vigamox eye drops

#### **6. RESPONSIBILITIES:**

- 6.1 Neonatologist
- 6.2 Ophthalmologist
- 6.3 All NICU staff





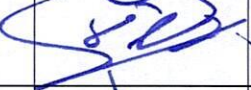


#### **7. APPENDIX:**

N/A

#### **8. REFERENCES:**

- 8.1 Practical Guidelines for Screening and Treatment of Retinopathy of Prematurity in Saudi Arabia.

9. APPROVAL:

	Name	Title	Signature	Date
Prepared by:	Ms. Afrah Saud Al Shammari	NICU Head Nurse		January 05, 2025
Prepared by:	Dr. Falah Nabhan Al Shammari	NICU Quality Coordinator		January 05, 2025
Reviewed by:	Mr. Sabah Turayhib Al - Harbi	Director of Nursing		January 07, 2025
Reviewed by:	Dr. Sarhan Hamdan Al Shammari	NICU Head of the Department		January 08, 2025
Reviewed by:	Mr. Abdullellah Ayed Al Mutairi	QM&PS Director		January 09, 2025
Reviewed by:	Dr. Tamer Mohamed Naguib	Medical Director		January 12, 2025
Approved by:	Mr. Fahad Hazam Al -Shammari	Hospital Director		January 19, 2025