

CLINICAL PRACTICE GUIDELINE FOR PREVENTION, DIAGNOSIS AND MANAGEMENT OF RETINOPATHY OF PREMATUREITY

- **Title:** Clinical Practice Guideline for prevention, diagnosis, and management of retinopathy of prematurity
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- **Publication date:** *July/2020*
- **Publishing house:** EsSalud Social Security. “Health Technology Assessment and Research Institute (IETSI in Spanish)
- **Abstract:**
- This paper abstracts the Clinical Practice Guideline (CPG) on health maintainace interventions for older adults at the primary care level. To perform this CPG, a guideline task force (GTF) was formed with specialized physicians and methodologists, the group proposed five clinical questions. Due to two of the CPGs initially included met all the criteria for its adoption, the GTF decided to develop an adopted CPG. Certainty of evidence was evaluated using Grading of Recommendations Assessment, Development, and Evaluation (GRADE) methodology. In periodical work sessions, the group used GRADE methodology for reviewing the evidence and formulating recommendations. Ten recommendations (eight strong and two conditional), 29 good clinical practice items and one flowchart were formulated.
- **Key words:** Practice Guideline; Retinopathy of Prematurity; screening; therapeutics; GRADE Approach
- **PICO questions for CPG:**

RISK FACTORS AND SCREENING			
Question 1: What are the risk or protective factors for the occurrence of retinopathy of prematurity?			
POPULATION	INTERVENTION	COMPARATOR	OUTCOME(S)
Breast feeding			
Premature newborns	Human milk or colostrum	Substitute formula or non-human milk	<ul style="list-style-type: none"> • Occurrence of ROP • Adverse effects
Erythropoietin			
Premature newborns	Early EPO	Late EPO (8 to 28 days old)	<ul style="list-style-type: none"> • Occurrence of ROP • Adverse effects
Oxygen levels			

Premature newborns	Low oxygen concentration (21%)	High oxygen concentration (>80%)	<ul style="list-style-type: none"> • Occurrence of ROP • Adverse effects
Target Oxygen saturation			
Premature newborns	High oxygen concentration (>80%)	Low oxygen concentration (<71%)	<ul style="list-style-type: none"> • Occurrence of ROP • Adverse effects
Range for Oxygen saturation			
Premature newborns	Low Oxygen saturation (85%-89%)	High Oxygen saturation (91%-95%)	<ul style="list-style-type: none"> • Occurrence of ROP • Adverse effects
Question 2: What are the usefulness and conditions of the screening for retinopathy of prematurity in premature newborns?			
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Question 3: What is the ROP screening technique used in premature newborns?			
POPULATION	INTERVENTION	COMPARATOR	• OUTCOME(S)
Pupillary dilation			•
Premature newborns	Phenylephrine 2,5% + tropicamide 0,5%	Cyclopentolate 0,2% + Phenylephrine 1%	<ul style="list-style-type: none"> • Pupillary dilation • Adverse events
Telemedicine			•
Premature newborns	Binocular Indirect ophthalmoscopy (BIO) Telemedicine		<ul style="list-style-type: none"> • Sensitivity • Specificity
Use of eyelid speculum and scleral indenter			
Premature newborns	Use of eyelid speculum and scleral indenter		<ul style="list-style-type: none"> • Improvement of Peripheral Nerve Visualization
Stopping ophthalmological exams			
Premature newborns without ROP	Stopping ophthalmological exams		<ul style="list-style-type: none"> • Occurrence of ROP

TREATMENT AND FOLLOW-UP			
Question 4: What are the indications for treatment of retinopathy of prematurity diagnosed in newborns?			
Question 5: What are the indications for follow-up of retinopathy of prematurity diagnosed in newborns?			