Kesesuaian diagnosis retinopati prematuritas antara peserta Program Pendidikan Dokter Spesialis (PPDS) mata dengan konsultan Pediatric Ophthalmology (PO) berdasarkan interpretasi foto wide field digital retinal imaging (RetCam) = Agreement of image based retinopathy of prematurity diagnosis between ophthalmology residents and pediatric ophthalmologists

Asri Setiawati, author

Abstrak

ABSTRAK
 Latar Belakang: Banyaknya jumlah kasus ROP yang terlambat dirujuk ke RSCM-Kirana menunjukkan bahwa penanganan ROP di Indonesia masih
merupakan tantangan. Keterlambatan diagnosis ROP yang ditemukan di RSCM tersebut dapat disebabkan oleh terbatasnya dokter mata ahli retina dan pediatric ophthalmologist (PO) dan kurangnya pengetahuan dokter mata umum dalam
mendiagnosis ROP. Pengetahuan dan keterampilan mendiagnosis ROP
merupakan salah satu mata ajar dalam program pendidikan dokter spesialis mata
di FKUI. Data mengenai seberapa baik pengetahuan PPDS tersebut dalam
mendiagnosis ROP belum tersedia.
Tujuan: Mengevaluasi kemampuan PPDS mata dalam mendiagnosis ROP
berdasarkan pembacaan hasil foto wide field digital retinal imaging (WFDRI)
bayi prematur.
Metode: Sebanyak 25 set foto WFDRI dibaca dan diinterpretasi oleh 15 subjek
PPDS mata, dan digolongkan ke dalam 4 klasifikasi: tidak ada ROP, ROP ringan,
ROP tipe 2, dan ROP yang memerlukan terapi. Pembacaan oleh subjek tersebut
dihitung nilai kesesuaiannya (Kappa) terhadap pembacaan oleh 3 konsultan PO
sebagai referensi, kemudian ditentukan tingkat kesesuaian berdasarkan
penggolongan nilai Kappa. Tingkat kesesuaian yang diharapkan adalah ?sangat
baik?, khusus untuk penentuan ROP perlu terapi, nilai Kappa yang diharapkan
adalah 1,00.
Hasil: Dalam penentuan adanya ROP, seluruh subjek memiliki tingkat kesesuaian
?sangat baik? (Kappa 1,00); dalam penentuan ROP ringan atau lebih berat, hanya
1 dari 15 subjek memiliki tingkat kesesuaian ?sangat baik?, 9 subjek memiliki
kesesuaian ?baik?, dan 5 subjek memiliki kesesuian ?sedang? (Kappa 0,65+0,15);
dalam penentuan ROP tipe 2 atau lebih berat, 10 dari 15 subjek memiliki tingkat
kesesuaian ?sangat baik?, 3 subjek memiliki kesesuaian ?baik?, dan 2 subjek
memiliki kesesuaian ?sedang? (Kappa 0,45-1,00); dalam penentuan ROP yang
memerlukan terapi, hanya 7 dari 15 subjek yang memiliki nilai Kappa 1,00,
namun 12 dari 15 subjek memiliki tingkat kesesuaian ?sangat baik?, dan 3 subjek
memiliki kesesuaian ?baik? (Kappa 0,75-1,00). Dalam penentuan zona dan
stadium, hanya sebagian kecil subjek yang memiliki tingkat kesesuaian ?sangat

baik? (Kappa 0,35-0,81 dan 0,32-0,91); sedangkan dalam penentuan plus disease, hanya 6 dari 15 subjek yang memiliki nilai Kappa 1,00.
Kesimpulan: Kemampuan PPDS mata dalam mendiagosis ROP belum seluruhnya mencapai target yang diharapkan. ABSTRACT
 Background: Numerous late-stage ROP cases that referred to Cipto
Mangunkusumo Hospital (Kirana) showed us that ROP management in Indonesia is still a challenge. The delayed management might be caused by limited number of vitreoretinal specialist or pediatric ophthalmologist, and inadequate diagnostic knowledge of ROP of the general ophthalmologists. In condition of limited number of vitreoretinal and pediatric ophthalmologists, the general ophthalmologists are suggested to be taking part in ROP screening program. In FKUI, ROP screening has been a part of residency training program, however, there was no available data of ROP diagnostic knowledge of the residents.
Purpose: To measure agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist.
Methods: Twenty-five sets of retinal photographs of premature infants were interpreted by 15 ophthalmology residents and pediatric ophthalmologists, and classified into 4 categories: no ROP, mild ROP, type 2 ROP, and treatmentrequiring ROP.
Agreements
are
measured
for
diagnosis
classification,
stage,
zone,

and

plus disease detection. Level of agreement was measured based on Kappa value of each subjects. The expected level of agreement for each category was ?very good agreement?. For treatment-requiring ROP and plus disease, the expected Kappa value was 1.00.
Results: For detection of no ROP, agreement of all subjects was ?very good? (Kappa 1,00); for detection of mild or worse ROP, only 1 of 15 subjects has ?very good agreement?, 9 of 15 subjects have ?good agreement?, and 5 subjects have ?moderate agreement? (Kappa 0,65+0,15); for detection of type 2 or worse ROP, 10 of 15 subjects have ?very good agreement?, 3 subjects have ?good agreement?, and 2 subjects have ?moderate agreement? (Kappa 0,45-1,00); for detection of requiring-therapy ROP, only 7 of 15 subjects that have Kappa value of 1.00, however, 12 of 15 subjects have ?very good agreement?, and only 3 subjects have

?good agreement? (Kappa 0,75-1,00). For detection of stage and zone of ROP, only a little number of subjects have ?very good agreement? (Kappa 0.35-0.81, and 0.32-0.91, respectively); and for plus disease detection, only 6 of 15 subjects have Kappa value of 1.00.
Conclusion: Agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist has not achieved the expected target yet. ;Background: Numerous late-stage ROP cases that referred to Cipto
Mangunkusumo Hospital (Kirana) showed us that ROP management in Indonesia is still a challenge. The delayed management might be caused by limited number of vitreoretinal specialist or pediatric ophthalmologist, and inadequate diagnostic knowledge of ROP of the general ophthalmologists. In condition of limited number of vitreoretinal and pediatric ophthalmologists, the general ophthalmologists are suggested to be taking part in ROP screening program. In FKUI, ROP screening has been a part of residency training program, however, there was no available data of ROP diagnostic knowledge of the residents.
Purpose: To measure agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist.
Methods: Twenty-five sets of retinal photographs of premature infants were interpreted by 15 ophthalmology residents and pediatric ophthalmologists, and classified into 4 categories: no ROP, mild ROP, type 2 ROP, and treatmentrequiring ROP.
Agreements
are
measured
for
diagnosis
classification,
stage,
zone,

and

plus disease detection. Level of agreement was measured based on Kappa value of each subjects. The expected level of agreement for each category was ?very good agreement?. For treatment-requiring ROP and plus disease, the expected Kappa value was 1.00.
Results: For detection of no ROP, agreement of all subjects was ?very good? (Kappa 1,00); for detection of mild or worse ROP, only 1 of 15 subjects has ?very good agreement?, 9 of 15 subjects have ?good agreement?, and 5 subjects have ?moderate agreement? (Kappa 0,65+0,15); for detection of type 2 or worse ROP, 10 of 15 subjects have ?very good agreement?, 3 subjects have ?good agreement?, and 2 subjects have ?moderate agreement? (Kappa 0,45-1,00); for detection of

requiring-therapy ROP, only 7 of 15 subjects that have Kappa value of 1.00, however, 12 of 15 subjects have ?very good agreement?, and only 3 subjects have ?good agreement? (Kappa 0,75-1,00). For detection of stage and zone of ROP, only a little number of subjects have ?very good agreement? (Kappa 0.35-0.81, and 0.32-0.91, respectively); and for plus disease detection, only 6 of 15 subjects have Kappa value of 1.00.
Conclusion: Agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist has not achieved the expected target yet. ;Background: Numerous late-stage ROP cases that referred to Cipto
Mangunkusumo Hospital (Kirana) showed us that ROP management in Indonesia is still a challenge. The delayed management might be caused by limited number of vitreoretinal specialist or pediatric ophthalmologist, and inadequate diagnostic knowledge of ROP of the general ophthalmologists. In condition of limited number of vitreoretinal and pediatric ophthalmologists, the general ophthalmologists are suggested to be taking part in ROP screening program. In FKUI, ROP screening has been a part of residency training program, however, there was no available data of ROP diagnostic knowledge of the residents.
Purpose: To measure agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist.
Methods: Twenty-five sets of retinal photographs of premature infants were interpreted by 15 ophthalmology residents and pediatric ophthalmologists, and classified into 4 categories: no ROP, mild ROP, type 2 ROP, and treatmentrequiring ROP.
Agreements
are
measured
for
diagnosis
classification,
stage,
zone,

and

plus disease detection. Level of agreement was measured based on Kappa value of each subjects. The expected level of agreement for each category was ?very good agreement?. For treatment-requiring ROP and plus disease, the expected Kappa value was 1.00.
Results: For detection of no ROP, agreement of all subjects was ?very good? (Kappa 1,00); for detection of mild or worse ROP, only 1 of 15 subjects has ?very good agreement?, 9 of 15 subjects have ?good agreement?, and 5 subjects have ?moderate agreement? (Kappa 0,65+0,15); for detection of type 2 or worse ROP,

10 of 15 subjects have ?very good agreement?, 3 subjects have ?good agreement?, and 2 subjects have ?moderate agreement? (Kappa 0,45-1,00); for detection of requiring-therapy ROP, only 7 of 15 subjects that have Kappa value of 1.00, however, 12 of 15 subjects have ?very good agreement?, and only 3 subjects have ?good agreement? (Kappa 0,75-1,00). For detection of stage and zone of ROP, only a little number of subjects have ?very good agreement? (Kappa 0.35-0.81, and 0.32-0.91, respectively); and for plus disease detection, only 6 of 15 subjects have Kappa value of 1.00.

Conclusion: Agreement of image-based ROP diagnosis between ophthalmology residents and pediatric ophthalmologist has not achieved the expected target yet.