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TITLE :   Choroidal and scleral invasion in retinoblastoma
            A classification proposal

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Purpose :   To define a classification to choroidal and scleral invasion in
            retinoblastoma, that may serve as a basis for clinical studies
            concerning the risks for metastasis due to choroidal invasion, the
            effects of prophylactic treatment, and thus to determine the proper
            indications for adjuvant therapy.

Methods :   By studying PA specimens of eyes enucleated because of
            retinoblastoma with emphasis on the nature and extent of scleral and
            choroidal invasion

Results :   A 5-stage classification together with standard photographs of the
            respective stages was developed.

Conclusion : It is possible to define a simple classification for choroidal and
            scleral invasion in retinoblstoma.

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TITLE :   Optic nerve invasion in retinoblastoma
            A classification proposal

AUTHORS :   Tan K.E.W.P. , VALK P. van der, Imhof S. M., Moll A.C. &
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INSTITUTION : Free University Amsterdam - The Netherlands

Purpose :   To define a classification for optic nerve involvement in
            retinoblastoma, that may serve as a basis for clinical studies
            concerning the resks for metostasis due to optic nerve invasion, the
            effects of prophylactic treatment, and thus to determine the proper
            indications for adjuvant therapy.

Methods :   By studying the nature of optic nerve involvement in PA specimens
            of eyes enucleated because of retinoblastoma with regard to
            anatomical landmarks.

Results :   A 5-stage classification together with standard photographs of the
            respective stages was developed.

Conclusion : It is possible to define a simple classification for optic nerve
            involvement that specifies the nature and the extent of the invasion.

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BIOCHEMICAL STUDIES OF LACRIMAL FLUID IN PREDICTING
OF CLINICAL MANIFESTATIONS OF TRAUMATIC UVEITIS (TU
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Advanced Medical Training, Russia)

Purpose- To work out prognosis of TU course on the
basis of biochemical findings of the tear.

Methods- Activity of lactate dehydrogenase (LDH) and
malate hydrogenase (MDH) was determined by routine
standard spectrophotometry (V.V.Menshikov, 1987,Ame-
lung, 1968) adapted to small volume of the fluid.

Results- "Predictive index"of LDH/MDH RATIO WAS de-
ter during the first 24 hours after trauma at
patients with favourable (the 1-st group) and severe
course (the 2-nd group) of TU. Coefficient of
LDH/MDH ratio was 4,17±0,5 in the first group; in
the second one - 6,0±0,3; at healthy people -4,4±0,

Conclusions - Noninvasive studies of lacrimal enzy-
mes LDH and MDH activity give the possibility to
predict the character of TU clinical manifestations
in 68% of patients without any signs and symptoms
of the disease in the first 24 hours after trauma.

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6-RECEPTORS IN THE RABBIT LACRIMAL GLAND

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Purpose: 6-agonists and 6-blockers are widely used systematically for a
variety of diseases, producing tear production alterations. The effect of
various either selective or mixed 6-blockers and 6-agonists on tear
production of the rabbit lacrimal gland was investigated.

Method: Tear flow was determined by means of a direct cannulation of
the excretory duct of the rabbit lacrimal gland, for up to 90 min. under
pentobarbital anesthesia. Tear volume secreted was calculated knowing
the tube diameter and length of tear column. Selective 6_1, 6_2 agonists
and blockers, were injected I.M. either in a bolus dose one hour prior to
duct cannulation or as a single daily treatment for up to five days.

Results: 6_2-agonists, but not 6_1, given as a single I.M. injection,
significantly increase tear production ($p < 0.001$). Increasing the 6_1-
agonists dose an equal effect was observed too, due to selectivity
disappearance. Repeated daily administration of the 6_2-agonists
diminished significantly, ($p < 0.01$), , their increasing effect on tear
production, within 4-5 days, due to subsensitization of the lacrimal gland
6_2-receptors. All the 6-blockers administered either acutely or chronically,
reduced the tear production and abolished the 6_2-agonists increasing
effect. Although no apparent differences were observed using either
selective (6_1 or 6_2) blockers or those with ISA, among them the 6_2
selective blocker was found to be the most potent tear production
inhibitor ($p < 0.06$).

Conclusion: The rabbit lacrimal gland (probably acinar cells) carries
6_2-receptors which are involved in tear production (increase by 6_2-
agonists and inhibition by 6-blockers). These receptors develop
subsensitisation, due to chronic 6-agonists administration, within 4-5
days. Our conclusions might explain the inexistance of any clinically
significant tears increasing effect among the chronic 6_2-agonists users
and the dry-eye symptoms observed in patients under 6-blockers
treatment.