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Letters to the Editor

Comment on "Cellular and molecular aspects of diabetic nephropathy; the role of VEGF-A"

Comentario a "Cellular and molecular aspects of diabetic nephropathy; the role of VEGF-A"

Dear Editor,

We read the published article with the title of 'Cellular and molecular aspects of diabetic nephropathy; the role of VEGF-A'[1] with a great interest and we found worth sharing our clinical observations through a case to contribute to the their determination.

Katherine Carranza et al.[1] have stated that the experimental conditions VEGF-A decreased or after treatment with molecules developed against VEGF, it can be observed various pathologic processes such as glomerular basement membrane damage, proteinuria, acute renal failure and thromboembolic events. Monoclonal antibodies that bind the VEGF has long been used in systemic treatment protocol of solid tumors. Recently, by ophthalmologists, intravitreal administration of anti-VEGF agents seen as the primary treatment method in conditions of age- related macular degeneration, diabetic retinopathy, retinal vein occlusion.[2] Although systemic side effects are well known with the high dose intravenous use in cancer therapy, almost local side effects were reported associated with intraocular anti-VEGF treatment. However, despite the blood retinal barrier, anti-VEGF agents are detectable in systemic circulation after intraocular administration through uveal vessels or by aqueous humor outflow and might constitutes systemic adverse effect like nephropathy by antagonizing to VEGF-dependent pathway in glomeruli.[3]

We describe a case of nephrotic syndrome that were unable to detect significant findings for etiology in first research. But with detailed history we found that she had received intravitreal anti-VEGF due to diabetic retinopathy 10 days before the occurrence of symptoms. After the exclusion of other possible causes. We thought anti-VEGF agents might be responsible. In the literature, we found only 3 cases associated with renal toxicity of intraocular anti-VEGF therapy.[4–6]

We would like to remind that even at the small quantities used in the practice of ophthalmology, anti-VEGF agents may able to cause serious systemic effects including nephropathy.

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