

Relazione tra Diabete, controllo del livello glicemico e infezione oculare: uno studio di gruppo

Le infezioni palpebrali, ai dotti nasolacrimali e alla superficie della cornea così come la cheratite infettiva, si presentano con occorrenza maggiore in soggetti diabetici (1,2). Ad ogni buon conto, nonostante la diffusa convinzione che i diabetici siano più suscettibili di contrarre infezioni oculari (3), vi è povertà di dati raccolti sistematicamente che possano supportare o meno tale affermazione.

Una recente revisione di uno studio di osservazione e diversi test clinici hanno dimostrato una correlazione tra bassa glicemia e aumentato rischio di una larga varietà di infezioni in soggetti diabetici (4).

Abbiamo indagato l'associazione tra malattie infettive all'occhio esterne e strutture circostanti con il diabete e verificato se il controllo della bassa glicemia aumenta il rischio di infezione oculare nella popolazione affetta da diabete.

Uno studio condotto su due livelli è stato portato avanti dal centro dati del Royal College of General Practitioners Research and Surveillance Centre.

Il doppio livello consisteva in 1) uno studio di gruppo effettuato su un'intera popolazione per indagare la frequenza di infezioni oculari in soggetti affetti da diabete e in comparazione a soggetti non affetti da diabete e 2) uno studio di gruppo di una popolazione di diabetici per indagare il tasso dell'impatto del controllo glicemico sulle infezioni oculari in soggetti affetti da diabete.

Abbiamo misurato le infezioni contratte nell'arco di oltre 6 anni (dal 1 Gennaio 2010 al 31 Dicembre 2015).

Sono state prese in analisi due misure del controllo glicemico:

single HbA1c measurement and area under the HbA1c curve during the 6-year period. Other variables examined included age, sex, ethnicity, smoking status, BMI, diagnosis of connective tissue disorder, diagnosis and stage of retinopathy, and presence of maculopathy. We developed logistic regression models to determine infection risk in a total population of 938,440 without diabetes and 48,584 people with diabetes (3,273 with type 1 diabetes and 45,311 with type 2 diabetes). After adjustment for confounders and amendment of P values for multiple comparisons using the Bonferroni and Sidak corrections (5,6), type 1 and type 2 diabetes were associated with increased incidence of conjunctivitis (odds ratio [OR] 1.61, 95% CI 1.38–1.88, P, 0.0001, and OR 1.11, 95% CI 1.06–1.16, P, 0.0001, respectively). No association was found with blepharitis, sty/chalazion, periorbital cellulitis, keratitis/keratoconjunctivitis, lacrimal gland infection, or endophthalmitis. Glycemic control was not found to be associated with any infection. Diabetes was also associated with an increased incidence of antimicrobial prescriptions (for type 1 diabetes: OR 1.69, 95% CI 1.51–1.88, P, 0.0001; for type 2 diabetes: OR 1.17, 95% CI 1.13–1.20, P, 0.0001) (Table 1). We found that conjunctivitis occurs more frequently in people with diabetes. The higher incidence of conjunctivitis and prescriptions for ocular antimicrobial agents in people with diabetes may be explained in part by an increased propensity in this population to consult a doctor and to receive prescriptions. Even given this possibility, these data support the hypothesis that conjunctivitis is more common in people with diabetes; however, hyperglycemia does not appear to be a major predisposing factor to ocular infections. We did not find evidence for the common assertion that diabetes is associated with an increased incidence of other eye infections. We also did not find evidence that glycemic control has any influence on the incidence of eye infections.

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