EXAMEN DE METODOLOGIA CERCETĂRII ŞTIINȚIFICE MEDICALE

A) Dixon WG, Abrahamowicz M, Beauchamp ME, Ray DW, Bernatsky S, Suissa S, Sylvestre MP. Immediate and delayed impact of oral glucocorticoid therapy on risk of serious infection in older patients with rheumatoid arthritis: a _____ analysis. Ann Rheum Dis. 2012 Jul;71(7):1128-33. doi: 10.1136/annrheumdis-2011-200702. Epub 2012 Jan 12.

OBJECTIVES: To explore the relationship of serious infection risk with current and prior oral glucocorticoid (GC) therapy in elderly patients with rheumatoid arthritis (RA).
METHODS: An ___ analysis matched 1947 serious infection cases to five controls, selected from 16207 RA patients aged ≥ 65 between 1985-2003 in Quebec, Canada. Adjusted odds ratios for infection associated with different GC patterns were estimated using conventional models and a weighted cumulative dose (WCD) model.
RESULTS: Current and recent GC doses had highest impact on current risk. Doses taken up to 2.5 years ago were also associated with increased risk, albeit to a lesser extent. A current user of 5mg prednisolone had a 30%, 46% or 100% increased risk of serious infection when used continuously for the last 3 months, 6 months or 3 years, respectively, compared to a non-user. The risk associated with 5mg prednisolone taken for the last 3 years was similar to that associated with 30 mg taken for the last month. Discontinuing a two-year course of 10mg prednisolone six months ago halved the risk compared to ongoing use.
CONCLUSIONS: GC therapy is associated with infection risk in older patients with RA. Current and recent doses have greatest impact on infection risk, but the cumulative impact of doses taken in the last 2-3 years still affects risk. Knowing how risk depends on pattern of GC use will contribute to an improved benefit/harm assessment.

1. Ce tip de studiu este? Argumentați.
2. Cum ati descrie acest studiu (in ce consta)? Incercati sa puneti studiul in schema PICO (Pacienti, Expunere, Comparator, Efect) caracteristica studiilor clinice randomizate.
3. Care este măsura forței asocierii în acest tip de studiu?
4. Care ar fi valoarea ei (măsurii forței asocierii), dacă ar fi să comparăm riscul de infecție la indivizii care au luat cortizon în ultimii trei ani cu riscul la cei care nu au luat deloc?
5. Este un studiu prospectiv, sau retrospectiv? Argumentați.
6. Care este riscul de infecție la pacienții care au luat cortizon? Dar la cei care au luat cortizon?
7. Daca ar fi să găsim acest studiu pe PubMed/MEDLINE, cum ar trebui să efectuăm căutarea (unde, cu ce termeni)?

B) Howman A, Chapman TL, Langdon MM, Ferguson C, Adu D, Feehally J, Gaskin GJ, Jayne DR, O'Donoghue D, Boulton-Jones M, Mathieson PW. Immunosuppression for progressive membranous nephropathy: a UK randomised controlled trial. Lancet. 2013 Jan 8.

BACKGROUND: Membranous nephropathy leads to end-stage renal disease in more than 20% of patients. Although immunosuppressive therapy benefits some patients, trial evidence for the subset of patients with declining renal function is not available. We aimed to assess whether immunosuppression preserves renal function in patients with idiopathic membranous nephropathy with declining renal function.
METHODS: This ____ was undertaken in 37 renal units across the UK. We recruited patients (18-75 years) with biopsy-proven idiopathic membranous nephropathy, a plasma creatinine concentration of less than 300 µmol/L, and at least a 20% decline in excretory renal function measured in the 2 years before study entry, based on at least three measurements over a period of 3 months or longer. Patients were randomly assigned (1:1:1) by a random number table to receive supportive treatment only, supportive treatment plus 6 months of alternating cycles of prednisolone and chlorambucil, or supportive treatment plus 12 months of ciclosporin. The primary outcome was a further 20% decline in renal function from baseline, analysed by intention to treat.
FINDINGS: We randomly assigned 108 patients, 33 of whom received prednisolone and chlorambucil, 37 ciclosporin, and 38 supportive therapy alone. Two patients (one who received ciclosporin and one who received supportive therapy) were ineligible, so were not included in the intention-to-treat analysis, and 45 patients deviated from protocol before study end, mostly as a result of minor dose adjustments. Follow up was until primary endpoint or for minimum of 3 years if primary endpoint was not reached. Risk of further 20% decline in renal function was significantly lower in the prednisolone and chlorambucil group than in the supportive care group (19 [58%] of 33 patients reached endpoint vs 31 [84%] of 37, relative risk [RR] ___ [95% CI 0·24-0·78]; p=0·0042); risk did not differ between the ciclosporin (29 [81%] of 36) and supportive treatment only groups (HR 1·17 [0·70-1·95]; p=0·54), but did differ significantly across all three groups (p=0·003). Serious adverse events were frequent in all three groups but were higher in the prednisolone and chlorambucil group than in the supportive care only group (56 events vs 24 events; p=0·048).

1. Ce tip de studiu este acesta?
2. Ce înseamna „randomizare” şi care este scopul ei?
3. Credeti ca studiul a fost „dublu orb”? Este absolut necesară orbirea in acest studiu? De ce?
4. Puneti studiul in schema PICO (Pacienti, Intervenție, Comparator, Efect) caracteristică studiilor clinice randomizate.
5. Calculați RR, RRR, RAR şi NNT privind comparația tratament cu cortizon+clorambucil şi „*supportive* care”.
6. Intervalul de încredere 95% al RR a fost [0,24-0,78]; ce înseamnă acest lucru?
7. Credeti ca exista o legatura de cauzalitate intre tratamentul imunosupresor şi evoluția mai bună a pacienților? Argumentati!
8. Dacă ar fi să găsim acest studiu pe PubMed/MEDLINE, cum ar trebui sa efectuăm căutarea (unde, cu ce termeni)?