# Kesesuaian titer ana metode imunofluoresensi pengenceran 1/100 dan 1/1000 dengan dan tanpa pengenceran 1/320 serta kesesuaian pola ana dengan profil ana = Conformity of ana titer immunofluorescence assay by 1/100 and 1/1000 dilutions with and without 1/320 dilution and conformity of ana pattern with ana profile / Salwito Sartafuta

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Abstrak

[ABSTRAK<br>
Pendahuluan:
Antinuclear antibodies (ANA) adalah autoantibodi terhadap berbagai antigen intranuklear seperti deoxyribonucleic acid (DNA), small nuclear ribonucleoproteins (snRNPs) dan lain-lain. Hasil pemeriksaan ANA dilaporkan dalam titer dan polanya. Pada saat ini sesuai anjuran manufacturer, interpretasi titer ANA menggunakan kit Mosaic HEp-20-10/Liver (Monkey) dari Euroimmun hanya berdasarkan pengenceran 1/100 dan 1/1000 dengan intensitas fluoresensi strong, moderate atau weak, dan dilaporkan hasil titer 1/100, 1/320, 1/1000 atau >1/1000. Pada penelitian ini dilakukan pemeriksaan ANA dengan pengenceran 1/100, 1/320 dan 1/1000. Interpretasi pembacaan dinilai dengan (3 pengenceran) dan tanpa pengenceran 1/320 (2 pengenceran), kemudian dibandingkan kesesuaian antara keduanya. Terdapat lebih dari 35 pola ANA-IFA yang telah diidentifikasi, dengan sekitar 100 jenis kemungkinan autoantibodi. Pola tersebut dapat dijadikan langkah awal identifikasi jenis autoantibodi. Tersedia tes dengan kombinasi berbagai antigen yang dikenal sebagai profil ANA. Penelitian ini juga dilakukan untuk mengetahui kesesuaian pola ANA-IFA dengan profil ANA.
Metodologi Penelitian:
Penelitian ini merupakan penelitian dengan desain potong lintang, dilakukan di laboratorium imunologi RSCM selama Juni-Juli 2015. Subjek penelitian adalah serum yang dikirim ke laboratorium RSCM untuk pemeriksaan ANA dengan besar sampel 75 sampel. Data dilaporkan dalam bentuk deskriptif analitik. Data dari interpretasi 2 pengenceran (1/100 dan 1/1000) dengan 3 pengenceran (1/100, 1/320 dan 1/1000) dinilai kesesuaiannya dengan menggunakan uji statistik Kappa.
Hasil Penelitian:
Pola ANA-IFA tersering yang ditemukan adalah spekel kasar (35,2%), spekel halus (32,4%), nukleoli (13%), homogen (6,5%), sitoplasma granuler (6,5%), sentriol (3,7%), sentromer (0,9%), nuclear dots (0,9%) dan negatif (0,9%). Interpretasi yang sama antara 2 pengenceran dengan 3 pengenceran sebesar 80,6%. Pada perhitungan uji statistik kappa, didapatkan nilai kappa sebesar 0,67. Kesesuaian pola ANA-IFA dengan profil ANA adalah sebesar 20,8%.
Kesimpulan:

Nilai kappa sebesar 0,67 menunjukkan kesesuaian pada tingkat good. Walaupun demikian, kesalahan interpretasi titer ANA-IFA dengan menggunakan 2 pengenceran terjadi pada 19,4% kasus. Kesesuaian pola ANA-IFA dengan profil ANA sebesar 20,8%.

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ABSTRACT<br>

Background:
Antinuclear antibodies (ANA) are autoantibodies which react with various intranuclear antigens such as deoxyribonucleic acid (DNA), small nuclear ribonucleoproteins (snRNPs) and others. Laboratory results of ANA were shown as titer and pattern. Nowadays, manufacturer recommend ANA interpretation using Mosaic HEp-20-10/Liver kit (Monkey) from Euroimmun with 1/100 and 1/1000 dilutions and strong, moderate or weak fluorescence intensity. The titer should reported as 1/100, 1/320, 1/1000 or >1/1000. In this research, the dilution used were 1/100, 1/320 and 1/1000. The data were interpreted from 3 dilutions and 2 dilutions (without 1/320 dilution), the conformity from two interpretations were compared. There are more than 35 ANA-IFA patterns identified, with about 100 autoantibodies possibility. Those patterns act as baseline identification of autoantibodies. The test using few antigen combinations known as ANA profile. The purpose of this study also to compare the conformity of ANA-IFA pattern and ANA profile.
Methods:
This study is a cross-sectional research in immunology laboratory RSCM during June-July 2015. The subjects were serum sample for ANA test. The sample was 75. Data were shown as analytical descriptive data. The conformity of interpretation data from 3 dilutions and 2 dilutions were assessed using Kappa statistical analysis.
Results:
The ANA-IFA pattern shown were coarse speckled (35,2%), fine speckled (32,4%), nucleolar (13%), homogenous (6,5%), granular cytoplasm (6,5%), centriole (3,7%), centromere (0,9%), nuclear dots (0,9%) and negative (0,9%). The similar interpretation between 2 dilutions and 3 dilutions were 80,6%. Kappa statistical analysis showed Kappa score 0,67. The conformity between ANA-IFA pattern and ANA profile were 20,8%.
Conclusion:
Kappa score 0,67 showed the conformity in good level. Nevertheless, there are mistakes of ANA-IFA interpretation using 2 dilutions in 19,4% cases. The conformity of ANA-IFA pattern with ANA profile were 20,8%., Background:
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