

Anti-neutrophil cytoplasmic antibodies and thyroid diseases In Fayoum (Egypt)

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OBJECTIVES

BACKGROUND In the last few years there was an increased incidence of vasculitis in patients with thyrotoxicosis. Those vasculitic reactions ranged from simple purpuric skin lesion to sever intra-alveolar hemorrhage and even to Steven Johnson Syndrome, Most of those vasculitic reactions occurred in patients receiving propylthiouracil or methimazole . But many other cases were detected in thyrotoxic patients not receiving those medications .**THE AIM OF THIS** work is to clarify whether the vasculatic lesions associated with hyperthyroidism are due to anti-thyroid medications or due to hyperthyroid diseases or due to both of them.

METHODS

this study included 125 males and females recruited from the internal medicine and outpatient clinic of fayoum university , the patients were divided into groups according to the thyroid function and disease status ,after thorough history and clinical examination all routine labs and p-ANCA were done for all the patients as well as the control group

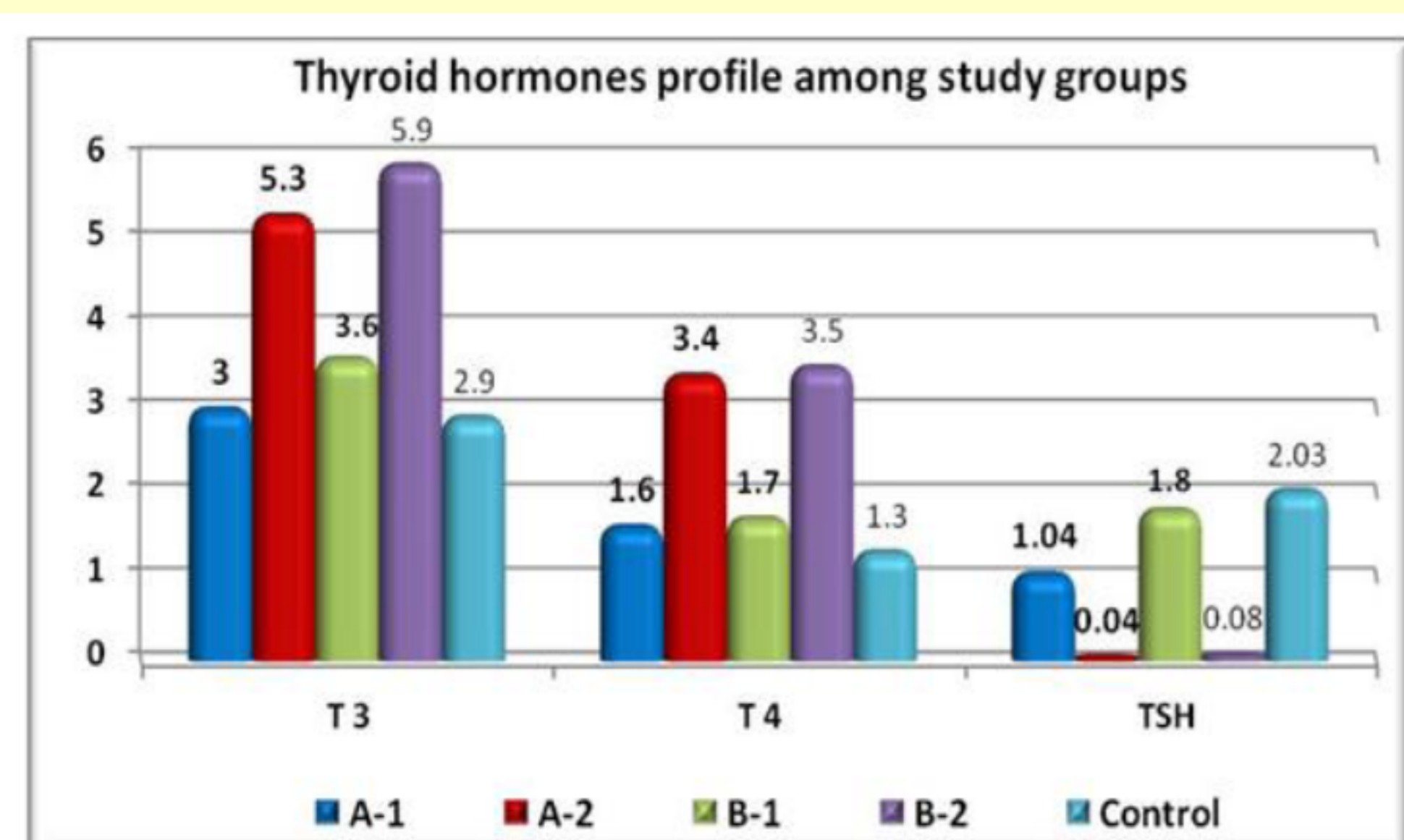


Figure (1): Comparison of thyroid hormones profile among different study groups.

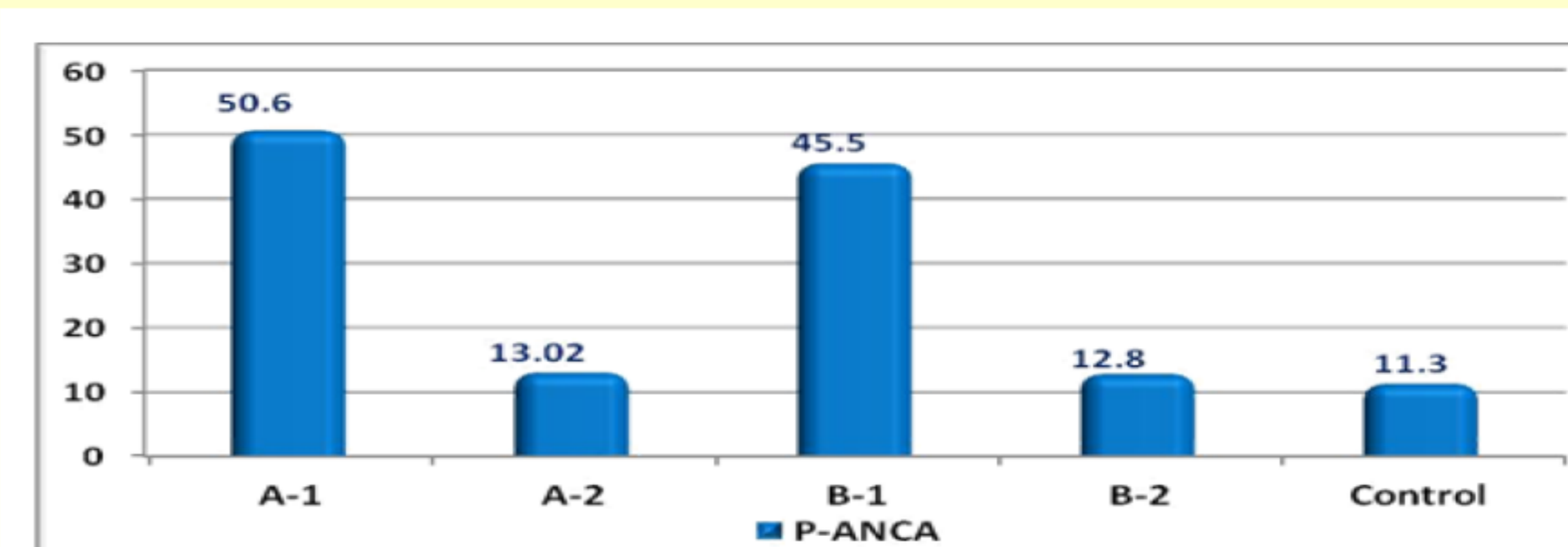


Figure (2): Comparison of p-ANCA level among different study groups. revealed that there was statistically significant difference where p-ANCA was positive in patients received anti-thyroid treatment ,group A-1(Graves on treatment) (mean is 50.6±16.3) and group B-1(nodular and multinodular thyrotoxicosis on treatment)(mean is 45.5±15.9) while it is negative in in patients did not receive anti-thyroid treatment, group A-2(Graves on no treatment)(mean is 13.02±6.7)and group B-2(nodular and multinodular thyrotoxicosis on no treatment)(mean is 12.8±7.3), and it is also negative in control group(mean is 11.3±3.2) with a P-Value<0.001.

RESULTS

The p-ANCA level was higher in patients with proteinuria than those with normal urine analysis with a P-value 0.01.and was significantly higher in patients with both arthralgia and skin rash, skin rash alone and arthralgia alone than those without these findings. P-value<0.01.It was also significantly higher in patients with skin lesion than those without skin lesion) P-value<0.01. There was statistically significant positive strong correlation between p-ANCA level and dose of treatment p-value <0.05,and statistically significant positive moderate correlation between p-ANCA level and duration of treatment p-value <0.05. While correlation between p-ANCA and thyroid hormones profiles after controlling of dose and duration of treatment, revealed that There was no statistically significant correlation between p-ANCA level and level of T3,T4 and TSH.

CONCLUSIONS

In conclusion , we found that MPO-ANCA(p-ANCA) associated vasculitis in patients of hyperthyroidism is related to antithyroid drugs not to the disease itself ,this mean that it is drug induced not disease related , and this finding was associated with propylethyouracil more than methemazol,with strong correlation between its occurrence and dose of drug and moderat correlation with duration of treatment , it is associated with some manifestation of vasculitis in the form of proteinuria, arthralgia and skin lesion in few percentage of patients ,however ANCA positivity was not necessarily associated with clinical manifestation of vasculitis.

References

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