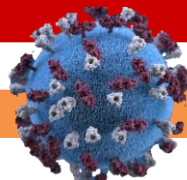


STUDY ON THE DIAGNOSTIC VALUE OF BLOOD INFLAMMATORY INDICATORS IN COVID-19

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OBJECTIVE

To explore the diagnostic value of blood inflammatory indicators in COVID-19.



METHODS

Patients with viral respiratory infection were selected according to the SARS-CoV-2 nucleic acid testing (NAT) and divided into case group and control group after PSM 1:1 match. The levels of WBC, NEU, LYM, MON, ESR, CRP, PCT were measured in the two groups. Independent sample T test was used to judge the difference between the two groups. The ROC curve was drawn to evaluate the diagnostic performance.

RESULTS

The WBC, NEU, MON and PCT levels in the case group were lower than those in the control group, and LYM was higher than that in the control group ($P>0.05$). In the case group, ESR and CRP were significantly increased ($P<0.05$). The AUC of WBC, NEU and MON were all less than 0.5; the AUC of LYM, CRP and PCT were 0.611, 0.648 and 0.611; and the Youden index were 0.208, 0.271 and 0.417. The sensitivity and specificity of PCT were 84.40% and 56.25%, while the sensitivity of CRP and LYM was 52.1% and 58.3%. The AUC of ESR was 0.894, the Youden index was 0.667, the sensitivity was 85.40%, and the specificity was 81.25%. ESR combined with CRP, AUC was 0.899, and Youden index was 0.667.

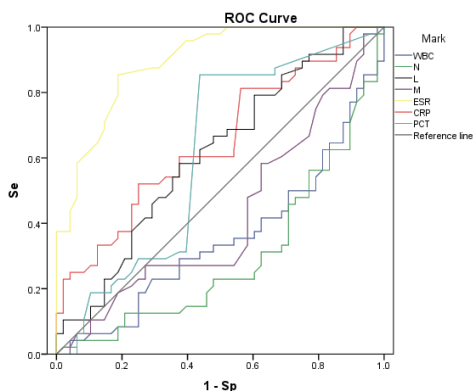


Figure ROC curve of blood inflammation indicators in diagnosing COVID-19

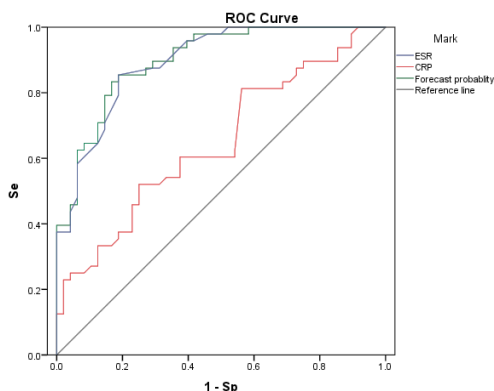


Figure ROC curves of ESR, CPR and combined detection for the diagnosis of COVID-19

CONCLUSION

ESR has good diagnostic accuracy and authenticity and can be used to differentiate COVID-19 from other common viral respiratory infections.