Short Communication

Received: June 22, 1981

Accepted: August 11, 1981

Acta haemat. 1982;67:217-219

Incidence of Circulating Anticoagulants in a Normal Population

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Key Words

Antifactor VIII
Antiprothrombinase
Circulating Anticoagulants
Normal Population

Abstract

We have determined the incidence of circulating anticoagulants in a group of 400 healthy subjects. We have detected two factor VIII inhibitors and one circulating anticoagulant against prothrombinase, with a total incidence of 0.75%. The presence of these inhibitors was not accompanied by hemorrhagic manifestations.

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Introduction

Acquired circulating anticoagulants are usually found in the blood of patients who have other concomitant diseases and less frequently in normal persons with no apparent underlying diseases [11, 13, 14].

The lack of incidence figures on the rare occurrence of circulating anticoagulants in normal persons prompted us to investigate the prevalence of circulating anticoagulants in a large sample of apparently healthy individuals.

shown in table I was screened through the following tests performed by standard techniques [2, 3]: whole blood clotting time, prothrombin time, partial thromboplastin time, and plasma fibrinogen determination. In order to establish the presence of a circulating anticoagulant, the method of Castro et al. [5] was applied if anomalies during these test procedures were detected. The possible site of action of circulating anticoagulants was evaluated as described by Krieger et al. [9], and the immunologic specificity was determined by the method of Lechner [10].

Table I. Age and sex distribution of the samples

Age, years males females

Materials and Methods

Blood from 400 subjects (blood donors and volunteers) with the age and sex distribution

20-30 53 49

30-40 61 62

40-50 50 48

50-60 36 41

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Table II. Clinical data and biological parameters in 3 healthy subjects with circulating anticoagulants

Patients

1

Sex

Age, years

Type of circulating anticoagulant

Immunology

Hemorrhagic manifestations

Follow-up time after diagnosis, months

Treatment

Evolution

female female

38 30

antiprothrombinase anti-VI 11IgG IgG

no no

8no no

persistent

male

47

anti-VIII

IgG

no

3

no

persistent

Results

Three circulating anticoagulants have been detected (incidence 0.75%). The clinical data and biological parameters of these 3 cases are listed in table II.

Discussion

Reports of circulating anticoagulants in healthy persons are infrequent. Our results indicate a higher incidence of circulating anticoagulants in normal subjects than previously suspected from a review of the literature. This is probably the result of the frequent occurrence of circulating anticoagulants in laboratory findings despite the absence of clinical manifestations [4, 6, 12]. To date, the most reported circulating anticoagulants in otherwise healthy subjects have produced no symptoms, as in our 3 cases, or minimal hemorrhagic complications. The occurrence of these inhibitors does not seem to be followed later on by the appearance of immunologic diseases [11]. In most instances these circulating anticoagulants will disappear spontaneously [13] or under treatment [8, 15].

We could not demonstrate any other abnormality in our 3 cases and the high incidence in our study may represent a genetic predisposition, as some authors have recently pointed out [1,4,7, 12].

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