Stability of plasma concentrations of N- and C-terminal atrial natriuretic peptides at room temperature

Str.—In their study of the stability of N- and C-terminal atrial natriuretic peptides (ANP) Cleland et al. compared the storage of samples at −20°C and −70°C. They found no difference between plasma C-terminal ANP concentrations when the samples were centrifuged immediately and stored at −70°C or −20°C, or if kept at room temperature as whole blood for six hours or plasma for up to 24 hours.

Dr Cleland also examined the role of aprotinin (Trasylol) in sample preservation. The addition of aprotinin to the sample made no difference to the N-terminal ANP concentration, but the effect on the C-terminal ANP concentration is not documented.

The stability of ANP in whole blood. The effect of time and aprotinin

<table>
<thead>
<tr>
<th>Whole</th>
<th>Time (hours)</th>
<th>With aprotinin</th>
<th>Without aprotinin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>temperature</td>
<td>87%</td>
<td>86%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>60%</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>At 0°C</td>
<td>100%</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>84%</td>
<td>83%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>78%</td>
</tr>
</tbody>
</table>

Results are expressed as percentage of the original ANP concentration (n = 5). Recovery of ANP when processed immediately is > 96%.

In our own investigations we examined the effect of delayed separation where the sample, collected into polypropylene tubes containing EDTA, was centrifuged and kept in the refrigerator at 0°C for one to three hours. Plasma ANP levels were measured by radioimmunoassay following Sep-pak plasma extraction as previously described. The results demonstrated that the addition of aprotinin made little difference to the plasma concentration of the C-terminal ANP (table).

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NOTICES

An Introduction to Vascular Biology will be held at St Thomas' Hospital, London, United Kingdom on 8–9 May, 1997. For further information, please contact the Secretariat, Hampton Medical Conferences, 127 High Street, Teddington, Middlesex TW11 8HH. (Tel: 0181 977 0011; fax: 0181 977 0055).

The 1997 Cardiology for Consultants weekend symposium designed for consultants and doctors training in cardiology is to be held at Exeter College, Oxford from 4–6 July, 1997. All conference costs and accommodation are covered by an educational grant from Bayer plc. A booking fee of £20 (cheque made payable to BHF) is refundable at the symposium. For an application form please telephone +0(1291) 672528.

The International Congress of Cardiac Imaging will be held at the Queen Mother Conference Centre, Edinburgh from 1–3 September, 1997. For further information, please contact Helen Wilde, 6 Napier Road, Redland, Bristol, United Kingdom. (Tel/fax: +0(117) 9739746; e-mail: m.res@bris.ac.uk) or visit http://www.bhs.path.cam.ac.uk/rad/radio/html on the Internet.

The 70th European Atherosclerosis Society Congress will be held in Jerusalem, Israel from 6–9 September, 1998. For further information please contact Professor Yechiel Stein, 70th EAS Congress, POB 50006, Tel Aviv 61500, Israel. (Tel: +972 3 5140014; fax: +972 3 5175674/5140077.)
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