Ciguatera results from eating large, predatory tropical and subtropical coral reef fishes that have bioaccumulated ciguatoxins (CTX). Affected subjects typically present with a constellation of gastrointestinal, neurological, cardiovascular and other signs and symptoms. The predominant clinical features and the types, severity and duration of symptoms vary with individual susceptibility, geographical region, type and dose of CTX involved and origin of ciguatoxic fish.

**O B J E C T I V E**

In this retrospective study, the main objective was to determine the incidence and severity of hypotension (systolic BP <100 mmHg) and bradycardia (heart rate <80 beats/minute) in ciguatera based on the experience of three general hospitals in Hong Kong during 2003-2006.

**S U B J E C T S & M E T H O D S**

Adult cases of ciguatera requiring treatment in the Prince of Wales Hospital (PWH) and two published case series (1,2) from North District Hospital (NDH) and Ruttonjee Hospital (RIH) were reviewed.

**R E S U L T S**

Patients generally developed gastrointestinal and/or neurological signs and symptoms that were typical of ciguatera. In addition, five of the seven PWH patients developed hypotension and sinus bradycardia (Table 1). In two patients (3,4), hypotension was particularly severe and prolonged, requiring ICU care for 2-3.5 days and intravenous infusions of dopamine, fluids and plasma volume expander.

In the two published case series, all 12 adults developed hypotension and bradycardia (sinos bradycardia in 10, junctional bradycardia in 1 and Wenckebach second-degree AV block in 1) (Table 1).

All 19 patients made a full recovery.

The reef fish species responsible for some of these local outbreaks are shown below.

**C O N C L U S I O N**

In ciguatera, hypotension and bradycardia were much more common than generally realised, and the hypotension could be severe and prolonged.

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**REFERENCES**


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**Table 1.** Hypotension and bradycardia in 19 adults with ciguatera, 2003-2006.

<table>
<thead>
<tr>
<th></th>
<th>PWH (n=7)</th>
<th>NDH (n=6)</th>
<th>RS (n=6)</th>
<th>Total (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:F</td>
<td>3:4</td>
<td>3:3</td>
<td>4:2</td>
<td>10:9</td>
</tr>
<tr>
<td>Age (y)</td>
<td>33 – 61</td>
<td>47 – 67</td>
<td>44 – 67</td>
<td>17/19</td>
</tr>
<tr>
<td>SBP &lt;100 mmHg</td>
<td>5/7*</td>
<td>6/6</td>
<td>6/6</td>
<td>17/19</td>
</tr>
<tr>
<td>HR &lt;60 bpm</td>
<td>5/7*</td>
<td>6/6</td>
<td>6/6</td>
<td>17/19</td>
</tr>
</tbody>
</table>

*Including 2 patients with severe and prolonged hypotension requiring ICU care.