Keriorrhea (waxy diarrhea), a new sign to bear in mind

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Keriarrrhea (waxy diarrhea), a new sign to bear in mind

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Dear Editor,

We have recently treated three patients with keriarrrhea and would like to make a few comments. The cases were two females and a male aged 44, 28 and 49 years old, respectively. They were concerned due to the presence of one to three orange oily-mucous bowel movements, with or without feces. This only lasted 24-72 hours in all cases until regular bowel movements were recovered. There was no history of abdominal symptoms, rash or fever.

Until recently, this kind of event was very unusual in our country. However, it has become more frequent due to the increased ingestion of poorly cooked or raw food (sushi, sashimi, ceviche, etc.) (1-3) during the last decade. All our patients mentioned a recent intake of raw fish, which also occurred when this phenomenon was first described (4). The ingested fish belonged to the Gempylidae family (Lepidocybium flavobrunneum and Ruvettus pretiosus), also known as escolars and incorrectly classified as butterfish. Almost 20% of their weight is made of indigestible and non-absorbable wax esters or gempylotoxins (there is no specific lipase). Once inside the colon, they produce an osmotic laxative action and false diarrhea, with or without incontinence (5) (Table 1). A similar outcome occurs with the drug Orlistat®, when lipases are inhibited and induce steatorrhea. The histidine originated from an incorrectly preserved fish which is transformed by the intestinal microbiota into histamine
(3). Thus, this manifestation is sometimes accompanied by histamine toxicity symptoms, such as a headache, rash, abdominal pain or sweating. These are non-severe and self-limited symptoms which concern patients. It is important to know and identify this kind of condition in order to avoid inappropriate, expensive and unnecessary diagnostic tests.

References
Table 1. Characteristics of keriorrhea, wax esters and escolar fish

<table>
<thead>
<tr>
<th>Keriorrhea</th>
<th>Wax esters</th>
<th>Escolar fish</th>
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</thead>
<tbody>
<tr>
<td>– Intake of raw or boiled escolar fish <em>(sushi, sashimi, ceviche)</em></td>
<td>– Indigestible, non-absorbable and non-toxic</td>
<td>– Cheap and recently introduced into our internal market (mainly raw)</td>
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<tr>
<td>– Symptom onset: 20 min - 4 h (average 2 h)</td>
<td>– Non degradable with heat</td>
<td>– Subject to quality standards by Aecosan (Spanish Agency of consumption, food safety and nutrition) and the EU:</td>
</tr>
<tr>
<td>– Intensity depends on the amount ingested</td>
<td>– Liquids at blood temperature (low melting point)</td>
<td>• Sale: packing</td>
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<tr>
<td>– Duration of symptoms: 2-48 h</td>
<td>– Produce osmotic diarrhea (false diarrhea)</td>
<td>• Labeling: information about preparation, proper cooking and risks</td>
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<tr>
<td>– Self-limited and non-severe</td>
<td>– Sometimes incontinence</td>
<td>• Labeling: with scientific and common names</td>
</tr>
<tr>
<td>– No other abdominal symptoms, except when there is histamine toxicity</td>
<td></td>
<td>– Forbidden in Japan, South Korea and Italy. Authorized with recommendations in the EU, Australia, Canada and USA</td>
</tr>
<tr>
<td>– No further studies needed</td>
<td></td>
<td>– Fraudulently sold as butterfish, grouper, cod, white tuna or pompano</td>
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