Psoriasis as a side effect of β blockers

Doctors have been slow to recognise some of the side effects of β blockers in clinical practice. The oculomucocutaneous syndrome induced by practolol was not detected until experience with the drug had totalled one million patient years.1 The most common cutaneous reactions to β blockers other than practolol include psoriasisiform, lichenoid, or eczematous skin reactions.2 β Blockade may also trigger true psoriasis.2

We followed the course of psoriasis that had erupted or worsened during β blockade once the β blocking agent was withdrawn.

Patients, methods, and results

Ten patients receiving β blockers whose psoriasis had appeared (n=6) or noticeably worsened (n=4) during treatment were studied. Four patients showed characteristic nail changes (pitting and onycholysis), and three had joint symptoms. Two had skin lesions typical of palmoplantar psoriasis. The table shows the clinical details of the patients.

The β blocker was withdrawn from all patients except one (case 1), who was given an alternative β blocker because of aggravated anginal pain. In hypertensive patients the β blocker was replaced by calcium antagonists or angiotensin converting enzyme inhibitors, or both, and patients with coronary heart disease were given calcium antagonists and nitrates.

The extent of psoriatic lesions was examined in each patient. Antibodies to serum deoxyribonucleic acid and extractable nuclear antigens were determined, serum protein electrophoresis performed, and blood variables measured. Ecupitaneous tests were performed in all cases with a standard basic series and eight different β blockers with 10% β blocker in white soft paraffin. Biopsy samples were also taken for direct immunofluorescence. Control examinations were performed in all patients one, three, six, and 12 months after the β blocker was stopped.

No complications resulted from changing the treatment. Epicutaneous tests gave negative results for both the basic series and the β blockers. Direct immunofluorescence gave negative results. Antinuclear antibodies were not detected, and no changes were found in blood variables or serum proteins.

In four patients (cases 1, 6, 8, and 10) psoriatic skin lesions healed completely after withdrawal of the drug; in case 6, however, the patient still had nail lesions. In all four patients psoriatic lesions had appeared during β blockade. In five others roughly 80% of the psoriatic skin lesions healed. In one patient (case 5) psoriasis recurred fully after 11 months’ remission. Healing of nail lesions was equally good. In cases 1 and 10 recovery was complete, and in cases 4 and 6 the changes were noticeably reversed. In cases 3 and 4 about 90% of the palmoplantar psoriasis disappeared.

One patient (case 4) was rechallenged after seven months when he received atenolol for four months; psoriasis erupted over the entire body surface within two months.

Comment

β Blockers have been reported to be associated with the recurrence or aggravation of psoriasis.4 Arntzen et al found that seven of 23 patients with psoriasis had developed the disease while taking β blockers. The drug was withdrawn in four of the patients, and three of them recovered totally.2 In the present series psoriatic lesions either resolved totally or were noticeably reduced after withdrawal of the β blocker in nine patients; there was one recurrence.

Psoriasis may be an inconvenient side effect of β blockade. We therefore suggest that β blockers be replaced by alternative treatment whenever safely feasible in all patients where psoriasis has developed or worsened during β blocker treatment.

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Successful treatment of multiple liver metastases by liver perfusion

The prognosis of patients with liver metastases associated with colorectal cancer is poor: the average survival is about six months, and although there are reports of long term survival, virtually all patients are dead within two years.1 Wood suggested, however, that although most patients with widespread metastases are dead within two to three years, 16% of those with solitary metastases are alive at five years.2

A recent report suggested that perfusion of the liver with heparin and fluorouracil reduces the development of liver metastases postoperatively.3 We report on a man with multiple tumour deposits in the liver who survived for four years after treatment with perfusion.

Case report

A man of 62 presented with a carcinoma of the right colon. At laparotomy he was noted to have multiple (pin head) tumour deposits in the left lobe of the liver; the right lobe was clear and there were no peritoneal seedlings. A right hemicolectomy was performed (no glands were affected). Subsequent histological examination confirmed secondary adenocarcinoma in the liver. Each lesion was...
treated by diathermy, and there was no clinical evidence of further deep seated lesions. A cannula was placed in the portal vein through the left gastroepiploic vein, and the liver was perfused with heparin and fluorouracil continued for one week.

At a subsequent laparotomy for a second carcinoma (rectum) seven months later there was no evidence of any tumour in the liver. He remained well during the next four years with no clinical evidence of recurrent tumour and died suddenly from a myocardial infarct. Regular monitoring of carcinoembryonic antigen during the four years always yielded normal results, the concentration three weeks before his death being 5 ng/ml (normal 0-9 ng/ml). The liver was removed intact at necropsy and fixed in formaldehyde. Whole organ slices at 5 mm intervals did not show any macroscopic tumour deposits; 20 standard histological blocks from all areas of the liver did not show any microscopic evidence of secondary tumours.

Comment

Surgical resection seems to be indicated for single hepatic metastases, although Finlay and McArdle found that even in these cases surgery should be approached with caution: four of their six patients with single occult metastases (identified by computed tomography) had multiple deposits within six months. The argument favouring surgical resection is certainly not as convincing when deposits are multiple, even when they are apparently confined to one lobe.

It is important for a patient with multiple metastases, even confined to one lobe as with our patient, is very poor, and the chances of a disease free liver after four years are slight. There is some evidence that liver perfusion improves the prognosis of patients, at least those with Dukes's stage B colonic tumours, but whether our patient's four-year survival can be attributed to the perfusion or to the diathermy is not known. As tumour deposits were visible on the surface of the liver, however, there were probably further tumours in its substance; perfusion of the liver was therefore an important factor helping his survival. This furthers the case for postoperative perfusion of the liver in patients with no obvious metastases but perfusion of the remaining liver after hepatic resection for metastases may also improve the prognosis.


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New technique of blind peritoneal biopsy

Blind peritoneal biopsy is an accepted alternative to direct vision biopsy. Different methods vary in their technical ease, diagnostic accuracy, and incidence of complications. I have used the forward biting fibroptic endoscopic biopsy forceps for blind peritoneal biopsy during routine abdominal paracentesis and report the results in 18 patients with ascites.

Biochemical, cytological, and biopsy results in 18 patients with ascites grouped according to diagnosis

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Tuberculosis</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of patients</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Mean age in years (range)</td>
<td>55 (30-70)</td>
<td>67 (62-75)</td>
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<tr>
<td>Fluid protein</td>
<td>Exudate in 6</td>
<td>Exudate in all</td>
</tr>
<tr>
<td>Fluid cytology for malignant cells</td>
<td>Positive in 3, suspicious in 1</td>
<td>Negative in all</td>
</tr>
<tr>
<td>First biopsy result</td>
<td>Malignant in 6</td>
<td>Tuberculosis in all</td>
</tr>
<tr>
<td>Second biopsy result</td>
<td>Malignant in 1</td>
<td>Fibrinous inflammation in 1, failure in 2</td>
</tr>
<tr>
<td>Not done</td>
<td>Not done</td>
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