Conclusions

Treatment with Electrochemotherapy is particularly effective in patients with metastatic melanoma. Electrochemotherapy can be used in combination with immunotherapy and local therapies. Treatment of metastatic melanoma has a significant positive effect on the patient’s quality of life. Electrochemotherapy is a fundamental and essential treatment within the therapeutic programme for patients with metastatic melanoma.

References

**Rationale**

Patients with metastatic melanoma often present with cutaneous metastases located on different areas, such as the torso and the limbs. Pharmacological treatments have shown limited efficacy in treating multiple skin locations which leads to a significant deterioration in patient’s quality of life. (1)

**Electrochemotherapy: clinical experiences** (2)

**Efficacy of Electrochemotherapy**

Electrochemotherapy can be a single treatment option but also may be used multiple times if required. The treatment consists of a single intravenous injection of bleomycin followed by a local application of electrical pulses.

Analysis of the results from the European Register InspECT, for the treatment of multiple skin locations, states: “Notably, the local tumour control was 86% at 200 days of follow-up, meaning that patients with complete response maintained their response for a prolonged period of time”. (3)

**Patients who show the best response to Electrochemotherapy**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Patient OR [%]</th>
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<tbody>
<tr>
<td>Kunte C, Br J Dermatol, 2017 (3)</td>
<td>151 73</td>
</tr>
<tr>
<td>Campana LG, Eur J Surg Oncol, 2016 (4)</td>
<td>211 83</td>
</tr>
<tr>
<td>Ricotti F, Dermatol Ther, 2014 (5)</td>
<td>50 100</td>
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<tr>
<td>Caracò C, Melanoma Manag, 2013 (6)</td>
<td>89 77</td>
</tr>
<tr>
<td>Campana LG, Br J Surg, 2012 (7)</td>
<td>85 92</td>
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**Combination treatment in metastatic melanoma**

Following Electrochemotherapy treatment, it has been observed that the release of tumour antigens can facilitate the immune response. Early clinical experiences indicate that this combination therapy can positively impact on patients’ long term survival.

**NICE Guidance 2013**

In 2013 **NICE** has published a recommendation about Electrochemotherapy where symptoms can be reduced and quality of life can be improved on selected patients:

“There is sufficient evidence of efficacy of electrochemotherapy for treating metastases in the skin from tumours of non-skin origin and melanoma to support its use as a palliative treatment. There are no major safety concerns. Therefore, in the context of palliative treatment the procedure can be used with normal arrangements for clinical governance, consent and audit”.

**Electrochemotherapy in clinical practice**

The figures show a 58 years patient with multiple cutaneous metastases on the leg. Two months after the treatment with Electrochemotherapy, no HMB-45 cells were present in the treated area at the histologic analysis.