

# Total Axillar Lymphadenectomy does not Explain Secondary Lymphedema of Upper Limb

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## 1. Basic concept

It is usually admitted that secondary lymphedema is explained by total axillar lymphadenectomy in breast cancer treatment aggravated by radiotherapy. This idea represents for many authors now a justification of sentinel lymph node concept and as the choice of the best way to prevent apparition of lymphedema. But now, after 15 years of sentinel lymph node procedure, we can, of course consider that it is an excellent conceptual choice for “economy of lymphatic system”, but that does not, at all, prevent the apparition of edema! Many patients who underwent sentinel lymph node surgery develop secondary lymphedema. Why?

So the wrong question would be: “why do patients develop secondary lymphedema after breast cancer surgery?” and the right question could be: “why do patients with total axillar lymphadenectomy do not ALL develop systematically and automatically secondary lymphedema of upper limb?” and “why patients with sentinel lymph node surgery develop secondary lymphedema?”

## 2. Material and method

Since 1985 we treated 3500 patients with edema: 2800 secondary lymphedema; 2100 of upper limb and 700 of lower limb. In our series of 2100 patients of secondary lymphedema we always discover that all patients presented always one of the two capital circumstances which provide in our opinion the constitution of lymphoedema: the impairment of derivative ways or constitution of lymphocela

## 3. Results

The wound of derivative pathways of the lymphatic drainage of upper limb: 3 important vicariant ways: deltopectoral Mascagni's Sappey's way in deltopectoral space close to cephalic vein; scapular posterior way Caplan Leduc; tricipital way. This impairment, destruction is not concomitant with the cancer surgery and often ancient: an accidental wound, the ablation of a benign cutaneous tumour many years before, a little cyst etc... so... hazard! It is ancient and forgotten by the patient and the md. Axillar lymphocenter represents the great way

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the major “autostrada” But we can easily circulate in a minor way which allows circulation : that are the vicariant ways which represent an” authentic safety valve a “suppletive way”

The constitution of lymphocela with many post operative ponctions by the surgeon and very often the classical consequence: the lymphorrhoea many weeks and sometimes months with at the end the con-

stitution of lymphedema perhaps with hidden infection

#### **4. Conclusion**

The destruction of vicariant anatomical ways or the constitution of lymphocela are of prime importance in the constitution of secondary lymphedema of upper limb