Efficacy of Vinblastine in Primary Cutaneous Anaplastic Large Cell Lymphoma

Primary cutaneous anaplastic large cell lymphoma (C-ALCL) is a rare primary cutaneous CD30+ T-cell lymphoproliferative disorder that affects patients at a median age of 60 years. The disease presents as localized or less frequently disseminated nodules, plaques, or ulcers that mostly affect limbs. Prognosis is favorable (5-year overall survival, > 80%). According to the consensus recommendations, surgical excision or radiotherapy is recommended for localized lesions. For multifocal lesions, low-dose methotrexate is commonly used with a favorable response. Multiagent chemotherapy, such as cyclophosphamide, doxorubicin, vincristine, and prednisone, is effective but because of adverse effects and a high rate of relapses is reserved for disseminated relapse and extracutaneous dissemination. Brentuximab vedotin has excellent effectiveness, but its use remains off label, expensive, and sometimes responsible for neuropathy and severe infectious complications. Consequently, therapeutic recommendations are lacking for patients with methotrexate failure, especially for older patients. We report a series of 7 patients who received vinblastine as single-agent chemotherapy for relapsing multifocal C-ALCL.

Methods | We retrospectively collected files of patients with C-ALCL (without lymph node invasion) who received vinblastine as monotherapy in the dermatology departments of the institution members of the Cutaneous Lymphoma French Study Group. Institutional review board approval and informed consent were not required because this is a retrospective study.

Results | Seven patients (4 men) in their 30s to 90s (4 patients ≥70 years old) were included. The TNM stage was T1 in 1 case, T2 in 4 cases, and T3 in 2 cases. Lower limbs were involved in 6 cases. Median time from diagnosis was 5 years (range, 0.3–19 years). Six patients had previously received treatments with topical corticosteroids (n = 1), surgery (n = 1), radiotherapy (n = 4), methotrexate (n = 4), and/or multiagent chemotherapy (n = 3). One patient had contraindication to methotrexate (chronic renal insufficiency with anemia).

All patients received 6 mg/m² of vinblastine twice a month, except for 1 patient, who received 4 mg/m². All patients had partial (> 75%) or complete remission after a median of 4 infusions (Figure). Four patients experienced hematologic adverse effects: 3 had neutropenia (lowest neutrophil count was 153/μL [to convert to ×10⁹/L, multiply by 0.001]), 2 patients received granulocyte-colony stimulating factor, and 2 patients had anemia (lowest hemoglobin value was 7.3 g/dL [to convert to grams per liter, multiply by 10], 1 patient underwent transfusion). There were no infectious complications or neuropathy.

Discussion | Considering the age of patients affected by C-ALCL and the good prognosis of the disease, therapy with a favorable benefit to risk ratio is needed. Despite little strong evidence, low-dose methotrexate seems to be a first-line therapy with a very good safety profile, especially for older patients. Brentuximab therapy was effective for CD30+ cutaneous lymphomas in a phase 2 study with an overall response rate of 70% and progression-free survival of 150 days and also seems promising in other types of cutaneous T-cell lymphomas in an allogenic stem cell transplantation plan. However, its use is limited by its cost and the risk of neuropathy and severe infectious complications.

We report, for the first time to our knowledge, the efficacy of vinblastine as monotherapy for C-ALCL. Vinblastine is a vinca alkaloid commonly used in dermatology as a single agent in the treatment of Kaposi sarcoma with good tolerance, even in older patients. Vinblastine is successfully used as monotherapy for pediatric systemic ALCL but, to our knowledge, has never been reported for primary cutaneous lymphomas.
In our series, all patients had quick good-quality remission with a median progression-free survival of 6 months. The rapidity of the response supports the role of vinblastine instead of spontaneous regression in these patients with multifocal lesions and a long-term history of refractory disease. In our series, no patient had to discontinue use of the drug because of infection or severe toxic effects. Vinblastine should be studied in larger series to confirm its effectiveness and tolerance in disseminated or refractory C-ALCL. Its place as second-line treatment could be considered with failure of methotrexate and perhaps as first-line treatment in the case of contraindication to methotrexate, especially in older adults.

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**OBSERVATION**

**Practical Events in the Management of a Collodion Baby**

The term **collodion baby** (CB) refers to a newborn whose entire body is covered with an adherent, supple, parchment-like membrane.1 The condition is usually associated with ectropion, eclabium, hypotrichosis, hypoplastic nasal and auricular cartilage, and pseudocontractures. Collodion baby is a phenotype rather than a specific disease entity. The membrane eventually detaches in 3 to 4 weeks, usually revealing a permanent ichthyosis phenotype.

Due to the impaired barrier function of the CB’s skin, transepidermal water loss (TEWL) can be more than 6-fold greater than the TEWL of normal skin.2 Newborn CBs are at risk for hypernatremic dehydration, hypothermia, and infection. Promptly placing the baby in a humidified incubator, where the temperature-controlled, humidified environment greatly reduces TEWL, is considered essential.3 Clinical management also relies on daily bathing with water (with or without a mild cleanser) and frequent liberal applications of bland emollients, eg, petrolatum.

Most researchers recommend setting the incubator's humidity at 40% to 60%,4 although some advocate 90% to 100%.5 In addition, they recommend maintaining the child in the incubator for at least 4 weeks (or until the membrane completely detaches). These are not evidence-based incubator guidelines, and we believe that a CB’s transition from humidified incubators to open cribs may take place sooner than conventionally advised.

**Report of a Case** | We describe herein a newborn girl born at 39 weeks’ gestation to a 31-year-old healthy woman after an unremarkable pregnancy. A shiny, taut membrane covered her entire body (Figure), and further examination showed small, low-set ears appressed to the parietal scalp, mild ectropion and eclabium, and absent eyelashes and eyebrows. Because of increased TEWL, dehydration, hypernatremia, and decreased body temperature were of concern. Serum electrolytes, urine output, daily weights, albumin, blood urea nitrogen, and creatinine levels were monitored closely.

On day 2 of her life, our management departed from an unyieldingly strict regimen of confinement to the incubator by permitting 30-minute “holidays” outside the incubator,