

# Successful Treatment of Classical Hodgkin Lymphoma During Pregnancy in Malawi

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A 26-year-old, HIV-negative woman in Malawi presented with more than 6 months of painless, progressive cervical lymphadenopathy. At presentation, she was pregnant with an estimated gestational age of 16 weeks. She had been empirically treated for lymph node tuberculosis without improvement, and her medical history was otherwise unremarkable.

On examination, she appeared well, with bulky, bilateral cervical lymphadenopathy including a right neck mass measuring 13 cm. The physical examination was otherwise notable for a gravid abdomen consistent with her gestational age, and normal performance status. A confirmatory urine pregnancy test was positive, and CBC and serum chemistry results, including kidney and liver function, were unremarkable. The serum lactate dehydrogenase level was slightly elevated. Findings on a chest radiograph were normal, and abdominal ultrasound confirmed a viable intrauterine pregnancy of an estimated 16 weeks' gestation, with no abdominal lymphadenopathy or hepatosplenomegaly. Evaluation of a lymph node biopsy specimen confirmed classical Hodgkin lymphoma. Findings of a unilateral staging bone marrow biopsy specimen were normal.

There was no prior experience of treating lymphoma during pregnancy at our center, nor were there published reports describing this in sub-Saharan Africa, to our knowledge. Consequently, there was substantial uncertainty about how to

proceed, with often conflicting advice given to the patient by clinicians and nurses. Therefore, we convened a multidisciplinary meeting with the patient, her family, oncologists, and obstetricians. We emphasized that based on existing literature from resource-rich settings, the usual international recommendation would be to treat pregnant women with classical Hodgkin lymphoma with standard chemotherapy regimens, particularly after the first trimester, and that anticipated clinical outcomes would be good using this approach for both the mother and infant. The patient and her family were given the opportunity to ask questions, and recommendations were provided with a high level of consensus among the treatment team.

The patient agreed to commence treatment with doxorubicin, bleomycin, vinblastine, and dacarbazine, and successfully completed six cycles. She achieved a complete clinical response after cycle 2, and tolerated chemotherapy well, with prompt blood count recovery after each dose. She experienced no grade 3 or 4 adverse events, treatment delays, or treatment interruptions. She was closely followed by the obstetric team throughout chemotherapy with fetal ultrasounds, and delivered a healthy, full-term, female infant weighing 3.7 kg during cycle 5. At the time of this reporting, both the mother and infant are well, and the baby is 6 months old with normal growth and development (Fig 1).



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Classical Hodgkin lymphoma is one of the most common cancers during pregnancy.<sup>1,2</sup> Management during pregnancy requires consideration of fetal and maternal well-being. However, existing literature consistently demonstrates that classical Hodgkin lymphoma can be successfully treated using standard regimens during pregnancy, especially after the first trimester.<sup>1,2</sup> Studies have found no increased risk of low birth weight, stillbirth, or chromosomal abnormalities among newborns after maternal receipt of chemotherapy for classical Hodgkin lymphoma, and longer-term cognitive, cardiac, and developmental outcomes are reassuring.<sup>1-3</sup>

There are abundant community misconceptions with respect to both cancer and pregnancy in sub-Saharan Africa, let alone these two conditions occurring together. Health systems and providers have also often exhibited patriarchal approaches toward patients, with treatment plans dictated to patients rather than being extensively discussed and mutually agreed upon between clinicians and patients. However, as demonstrated by this case, the Malawi cultural context does not prohibit detailed and complex discussions about cancer treatment with patients, irrespective of their education level. Discussing risks and benefits openly with the patient as a multidisciplinary team led to a clear treatment plan that was acceptable to her and her family, and



**Fig 1.** The mother and infant doing well after chemotherapy completion.

resulted in good outcomes for both mother and infant. In conclusion, our case demonstrates that complex, multidisciplinary cancer care built on strong therapeutic relationships is possible even in highly resource-limited settings in sub-Saharan Africa. **JOP**

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#### Authors' Disclosures of Potential Conflicts of Interest

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