The Use of Osteopathic Manipulative Treatment (OMT) in a High-Risk Obstetric Patient with Upper Extremity Edema and Gestational Hypertension

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Hemodynamic changes of pregnancy can cause increased sodium and water retention. Pregnancy leads to an increased plasma volume of 30-50% when compared to non-pregnancy state. Upper extremity edema can be a sign of pre-eclampsia, which can have severe consequences in pregnancy. We present a case of a 33-year-old G2P1 high-risk obstetric patient at 31-weeks with gestational hypertension and migraine history presenting with headache and arm swelling. Physical examination showed severe edema of both upper extremities. Her high-risk specialist was considering bedrest for her symptoms. Laboratory work-up was negative for pre-eclampsia. Osteopathic examination revealed non-pitting edema of arms and legs, acute tissue texture changes from T1-4, thoracic outlet and diaphragm restrictions, poor costovertebral motion at T1-8, subscapular and occipito-mastoid restrictions. She was treated with osteopathic manipulative techniques including osteopathy of cranial field, diaphragm releases, articularatory, balanced ligamentous tension and inhibition. Treatment was aimed at removong restrictions, decreasing facilitation, and augmenting lymphatic drainage. After initiation of OMT, our patient had to be taken off labetalol by her high-risk specialist because her blood pressure was too low to necessitate medication and her upper extremity edema significantly decreased. This case illustrates the potential application of OMT in the treatment of edema and gestational hypertension in pregnancy. Future studies could help determine the role of OMT as an adjuvant approach for the treatment of women suffering from gestational hypertension and edema in pregnancy.