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| **Author, Journal Title, Year** | **Purpose/**  **Design** | **Subjects** | **Intervention**  **/Method** | **Outcome Measures** | **Analysis of Pertinent Results** |
| Tidhar, Drouin, & Shimony, *J Support Oncol,* 2007 | To examine the use of Aquatic Lymphatic Therapy (ALT) on a woman with vulvar cancer/  Case Study | 49 year old woman diagnosed with vular cancer 8 years priod to study. Pt. had bilateral LE lymphedema secondary to removal of bilateral inguinofemoral lymph node dissection. | Aquatic Lymphatic Therapy once weekly for 16 months. In ALT, particular exercises utilize hydrostatic pressure to decrease lymphedema. | Girth of lower extremities, and subjective reports of improved endurance. | Girth of LE’s significantly decreased after ATL compared to chronic lymphedema therapy (which utilizes manual lymphatic drainage and compression wrapping). |
| Risch, Koubenec, Beckmann, Lange, and Gauer, *European J of Physiology* | To examine the effects of “graded immersion on central circulation”/  Clinical Trail | 20 healthy males with an average age of 22.8 years. | Outcome measures were recorded while the subjects were immersed in water to the diaphragm and while lying supine. | Heart volume, distribution of lung blood flow, central venous pressure, vital capacity, and heart rate. | There was no significant difference between immersed versus supine position. Therefore, pt. may exercise in water with benefits of increased heart volume, increased central venous pressure, and lower heart rate (as obtained in supine). |
| Kent, Gregor, Deardoff, and Katz, *Obstetrics and Gynecology,* 1999 | To compare the effects of water immersion, static standing, and water aerobics on LE leg volume in pregnant women/ Clinical Trial | 18 healthy women between 20 and 33 weeks gestation | Outcome measures were compared between subjects in static standing on land, standing immersed to axilla, and when doing water aerobics for 30 mins each. | Urine vol, urine specific gravity, leg vol displacement, weight, HR, BP, and MAP | 30 minutes of standing on land significantly increased leg volume as compared to 30 minutes of water aerobics or static water immersion. |
| Wilcock, Cronin, and Hing, *Sports Medicine,* 2006 | To examine the physiological response of the body to water immersion without exercise. /Systemic Review | N/A | Examination of literature pertaining to the ability of water immersion to aid in the recovery from athletic performance. | Intravellular-intravascular fluid shifts, reduction of muscle edema, and “increased cardiac output (which increases blood flow and possible nutrient and waste transportation through body”. | The physiological response to hydrostatic pressure and “cool thermoneutral temperatures” of water may be beneficial for recovery from athletic events, particularly those which require quick recovery for multiple performances over a short period of time. |
| Ide, Belini, Caromano, *Clinics,* 2005 | To assess the effect of an aquatic exercise program versus a land based exercise program on respiratory muscle strength  /Randomized Clinical Trial | 59 healthy subjects between the ages of 60 and 65 years old. | The subjects were grouped into an aquatic exercise group, a land exercise group, and a control group. Experiment groups exercised 3 times per week for 10 weeks. | Inspiratory maximal pressure (IP max) and expiratory maximal pressure (EP max) | There was a significant improvement in respiratory muscle strength of aquatic exercise group compared to both the land based exercise group and the control group. This significant improvement may be attributable to the increased hydrostatic pressure in water versus land. |