ADIPOSE TISSUE IN CHEST REGION AND ITS IMPACT ON THE CONDITION OF VARIOUS ORGANS

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Introduction. The presence of the adipose tissue in the chest region might be linked to many pathological conditions meanwhile it can be physiological in many cases. A comprehensive assessment requires a morphological analysis in relation to the anatomical structures of the mediastinum to better understanding of its clinical significance and potential implications.
Material and methods. Observation and morphometry of 22 mediastinal complexes from the department's fund were performed. The results of 50 examinations, such as computer tomography, magnetic resonance, angiography, performed before therapeutic treatment and the preoperative period, as well as the operation protocols from the observation sheets, were subjected to the study. The results were processed statistically**.** Our data were compared with bibliographic data obtained by the same methods.
Results: Four cites of fat storage are distinguished: subcutaneous, visceral, special and ectopic cites. There are extrapleural, mediastinal, epicardial, pericardial, and myocardial fat depots in the thoracic cavity. Thoracic adiposity affects the lung function, with distinct gender differences.Visceral and subcutaneous fats are associated with the reduced lung functions. Cardiopulmonary changes might be due to pericardial, epicardial, periaortic, and extracardiac fat. Mediastinal fat-related lesions were also observed, underscoring the importance of distinguishing chest fat from gynecomastia. Additionally, thoracic fat accumulation showed a potential association with non-traumatic vertebral fractures, suggesting broader systemic implications.
Conclusion: The visceral fat is more toxic than subcutaneous. Distribution of adipose tissue in the chest region has impact on lung function, cardiopulmonary health, and musculoskeletal integrity. The need for further research to explore clinical significance of thoracic adiposity that will contribute to improve quality of clinical diagnosis, which will be helpful for therapeutic and preventive interventions. and this research may open the gates for the new generation of imaging technique for adipose tissue assessment.
Keywords: Cardiopulmonary health, Mediastinal fat, Ectopic fat depots, Adipose tissue disrubution, Extracardiac fat.