CONTRAST INDUCED ACUTE KIDNEY INJURY

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Background. CI-AKI remains as one of the most confusing conditions in medical imaging practice, covering urgent diagnosis; hence immediate intervention to avoid its negative outcomes. **Objective of study**. In this respect, a review and summary of strategies for the assessment and management of CI-AKI with accent on brand new developments in pathophysiology, risk stratification and diagnostic, and therapeutic approaches has been made here. **Material and methods.** An extensive literature review was undertaken covering the most recent studies; clinical guidelines have been included also. This included pertinent peer-review articles, clinical trial and meta-analysis about pathophysiology of CI-AKI, risk factors, diagnosis, and therapeutic management. **Results.** The article indicated multi-faceted approaches for the management of CI-AKI as follows: (1) Risk Stratification - it highlighted predictive models and biomarkers to identify high-risk patients; (2) Preventive Measures – pre-procedure and peri-procedure hydration with isotonic saline or sodium bicarbonate; (3) Pharmacological Interventions - agents like N-acetylcysteine, statins, and ascorbic acid in use during CI-AKI and new drugs for which emerging evidence exists; (4) Advanced Diagnostics; (5) Early detection - new biomarkers and advanced imaging techniques for sensitivity and specificity; (6) Timely Intervention; (7) Continuous monitoring of renal function post-contrast exposure and immediate therapeutic action. **Conclusions**. Treatment of CI-AKI requires a multi-dimensional approach with identifying a thorough risk profile, appropriate preventive strategies, and a watchful eye on monitoring. Nevertheless, advanced diagnostics and, on that basis, high individual risk profile-based treatment regimens represent determinant factors in the reduction of incidence of CI-AKI for better patient outcomes. **Keywords**: Contrast-induced acute kidney injury, CI-AKI, nephrotoxicity, contrast nephropathy, risk stratification, hydration protocols, pharmacological prophylaxis, diagnostic biomarkers.

FIBROSING INTERSTITIAL LUNG DISEASE AND ASSOCIATED COMORBIDITIES.

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Background. Idiopathic pulmonary fibrosis (IPF) is a fibrosing interstitial lung disease with a distinguished formation of scar in the lungs without any established incitement. Having a poor prognosis and an increased mortality, the presence of comorbidities can significantly affect the disease progression and overall patient health. **Objective of the study**. To present the overview of IPF and the most common comorbidities associated with it for early identification of complication and its management. **Material and methods.** An inclusive review of existing literature and clinical data taken from the medical databases was conducted. Utilization of Statistical data for quantitative and qualitative analysis. Annual prevalence and incidence rates were analyzed. **Results**. Review indicated a strong association of respiratory comorbidities such as COPD (6-67%), lung cancer (2.7-48%), Pulmonary hypertension (29-46%), non-respiratory comorbidities being GERD (up to 87%), Cardiovascular conditions (3.2-68%), Anxiety (30-50%), Depression (20-30%). The percentage of association of them varying due to the divergence in data gathered from extended studies. They were linked with accelerated disease progression and decreased quality of life. The prevalence and incidence showed a statistically significant annual increase in comorbidities. **Conclusion.** Recognizing and addressing these comorbidities were indispensable for comprehensive care of patients. Multidisciplinary approaches that integrate the management of both IPF and its associated comorbidities were recommended to enhance the outcome and quality of life. **Keywords:** Idiopathic pulmonary fibrosis, COPD, Lung cancer, GERD.