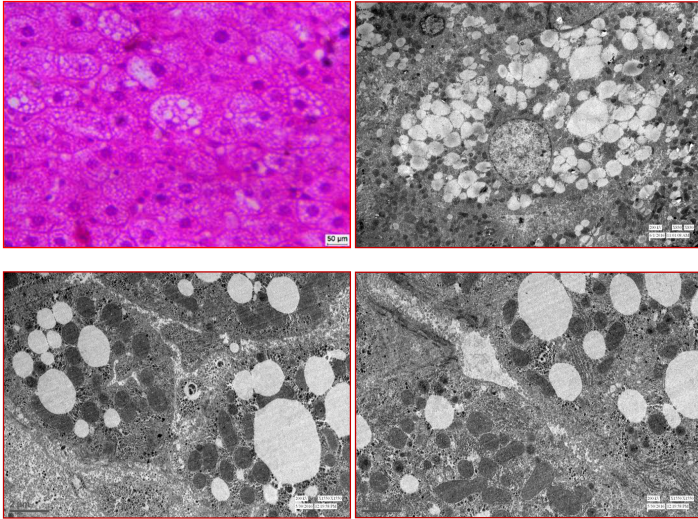


# A Handbook on Hepatotoxicity



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# A Handbook on Hepatotoxicity

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# Contents

## Chapters

|                                                                                                                                                                   | Page no |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1. An Introduction to Toxicology<br><i>Satendra Kumar Nirala and Monika Bhadauria</i>                                                                             | 25      |
| 2. Biochemical and Physiological Pattern of Hepatotoxicity<br><i>Monika Bhadauria and Satendra Kumar Nirala</i>                                                   | 36      |
| 3. Histological Pattern of Hepatotoxicity<br><i>Monika Bhadauria and Satendra Kumar Nirala</i>                                                                    | 51      |
| 4. Xenobiotic metabolism and Hepatotoxicity<br><i>Divya Bisht, Arvind Kumar Shakya and Monika Bhadauria</i>                                                       | 70      |
| 5. Antioxidant Defence Mechanism against Hepatotoxicity<br><i>Divya Bisht, Satendra Kumar Nirala and Arvind Kumar Shakya</i>                                      | 86      |
| 6. Acetaminophen induced Hepatotoxicity<br><i>Monika Sharma, Chandra Kant Sharma, Neetu Sharma, Arvind Kumar Shakya, Sadhana Shrivastava and Monika Bhadauria</i> | 99      |
| 7. Acrylamide induced Hepatotoxicity<br><i>Piyush Shukla and Satendra Kumar Nirala</i>                                                                            | 111     |
| 8. Aflatoxin induced Hepatotoxicity<br><i>Shamli S Gupte, Sadhana Shrivastava and Monika Bhadauria</i>                                                            | 125     |
| 9. Aspartame induced Hepatotoxicity<br><i>Lipika Dash and Gita Mishra</i>                                                                                         | 148     |

|                                                                                                                                                                             |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 10. Carbon tetrachloride induced Hepatotoxicity<br><i>Neetu Sharma, Banita Dhatwalia, Monika Sharma,<br/>Monika Bhadauria and Sadhana Shrivastava</i>                       | 158 |
| 11. Cyclophosphamide induced Hepatotoxicity<br><i>Ankita Mukherjee, Asim Amitabh Sahu, Satendra Kumar<br/>Nirala and Monika Bhadauria</i>                                   | 171 |
| 12. Diethylnitrosamine induced Hepatotoxicity and<br>Hepatocarcinogenesis<br><i>Shubham Singh and Monika Bhadauria</i>                                                      | 180 |
| 13. D-galactosamine induced Hepatotoxicity<br><i>Samrat Rakshit</i>                                                                                                         | 190 |
| 14. Ethambutol induced Hepatotoxicity<br><i>Amita Jaswal, Sadhana Shrivastava and<br/>Monika Bhadauria</i>                                                                  | 200 |
| 15. Ethanol induced Hepatotoxicity<br><i>Hemeshwer Kumar Chandra</i>                                                                                                        | 208 |
| 16. Heavy Metal induced Hepatotoxicity: Cadmium<br><i>Shahid Yousuf Ganie, Darakhshan Javaid, Syed Sanobar Qadri,<br/>Satendra Kumar Nirala and Mohd Salim Reshi</i>        | 226 |
| 17. Heavy Metal induced Hepatotoxicity: Lead<br><i>Samta Sharma, Shubham Singh, Satendra Kumar Nirala and<br/>Sadhana Shrivastava</i>                                       | 244 |
| 18. Heavy Metal induced Hepatotoxicity: Mercury<br><i>Pratima Dutta, Pavitra Behra, Piyush Shukla, Narottam Das<br/>Agrawal, Mohd Salim Reshi and Satendra Kumar Nirala</i> | 261 |
| 19. High Fat Diet induced Hepatotoxicity                                                                                                                                    |     |

|     |                                                                                                                                                                           |     |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|     | <i>Hemeshwer Kumar Chandra, Gita Mishra, Nisha Sahu,<br/>Arvind Kumar Shakya, Piyush Shukla, Satendra Kumar<br/>Nirala and Monika Bhadauria</i>                           | 273 |
| 20. | Isoniazid induced Hepatotoxicity<br><i>Nisha Sahu, Gita Mishra, Javid Ahmad Malik, Hemeshwer Kumar<br/>Chandra, Amita Jaswal and Monika Bhadauria</i>                     | 295 |
| 21. | Lipopolysaccharide induced Hepatotoxicity<br><i>Samrat Rakshit and Satendra Kumar Nirala</i>                                                                              | 304 |
| 22. | Light Metal induced Hepatotoxicity: Aluminum<br><i>Pavitra Behra, Gita Mishra, Narottam Das Agrawal, Pratime<br/>Dutta, Satendra Kumar Nirala and Monika Bhadauria</i>    | 318 |
| 23. | Light Metal induced Hepatotoxicity: Beryllium<br><i>Narottam Das Agrawal, Anjani Verma, Komal Singh Suman,<br/>Pavitra Behra, Pratime Dutta and Satendra Kumar Nirala</i> | 329 |
| 24. | $\alpha$ -Naphthylisothiocyanate induced Hepatotoxicity<br><i>Asim Amitabh Sahu, Ankita Mukherjee, Shubham Singh and<br/>Monika Bhadauria</i>                             | 348 |
| 25. | Polycyclic aromatic hydrocarbon induced Hepatotoxicity<br><i>Nisha Sahu</i>                                                                                               | 365 |
| 26. | Pyrazinamide induced Hepatotoxicity<br><i>Gita Mishra, Nisha Sahu, Javid Ahmad Malik, Hemeshwer<br/>Kumar Chandra, Satendra Kumar Nirala and Monika<br/>Bhadauria</i>     | 373 |
| 27. | Rifampicin induced Hepatotoxicity<br><i>Gita Mishra</i>                                                                                                                   | 381 |

28. Silica induced Hepatotoxicity  
*Shruti Saxena, Satendra Kumar Nirala and Sadhana  
Srivastava* 388
29. Thioacetamide induced Hepatotoxicity  
*Shubham Singh, Asim Amitabh Sahu, Ankita Mukherjee, Pavitra  
Behra, Satendra Kumar Nirala and Monika Bhadauria* 402
30. Vanadium induced Hepatotoxicity  
*Sadhana Shrivastava and Satendra Kumar Nirala* 414

## Chapter 4

### Xenobiotics Metabolism and Hepatotoxicity

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Xenobiotic metabolism and hepatotoxicity are intimately related because the liver is the main location for xenobiotic metabolism. The term "xenobiotics" comes from the Greek words "xenos" for "stranger" and "biotic" for "related to living things." These are chemical substances that foreign to the body or a living thing. Almost all pharmaceutical drugs are xenobiotics. Humans body expose various kind of xenobiotics *i.e.* chemicals, drugs, environmental pollutants, food additives, pesticides, cosmetics, fragrances, industrial chemicals which all are not naturally produced or expected to be present in the human body. Xenobiotics can enter into our body through various routes such as ingestion, inhalation and skin contact. They are typically metabolized and eliminated from the body by various detoxification processes. The liver is the primary site of xenobiotic metabolism and plays a crucial role in detoxifying and eliminating these foreign compounds. It has various kinds of enzymes to process xenobiotics. However, some xenobiotics can cause hepatotoxicity, leading to liver damage and impaired the