CHAPTER 218

Chemical Burns

Anthony F. Pizon
Michael Lynch

REFERENCES

1. Palao R, Monge I, Ruiz M, Barrett JP: Chemical burns: pathophysiology and treatment. *Burns* 36: 295, 2010. [PMID: 19864073]
2. Hardwicke J, Hunter T, Staruch R, Moiemen N: Chemical burns—an historical comparison and review of the literature. *Burns* 38: 383, 2012. [PMID: 22037150]
3. Tan A, Bharj AK, Nizamoglu M, et al: Assaults from corrosive substances and medico-legal considerations in a large regional burn center in the United Kingdom: calls for increased vigilance and enforced legislation. *Scars Burn Heal* 1: 2059513115612945, 2015. [PMID: 29799575]
4. Kearns RD, Cairns CB, Holmes JH, et al: Chemical burn care: a review of best practices. *EMS World* 43: 40, 2014. [PMID: 24940590]
5. International Society for Burn Injuries: Guidelines for burn care, part 2. *Burns* 44: 1617, 2018. [PMID: 30343831]
6. Clare RA, Krenzelok EP: Chemical burns secondary to elemental metal exposure: two case reports. *Am J Emerg Med* 6: 355, 1988. [PMID: 3390255]
7. Lewis CJ, Al-Mousawi A, Jha A, Allison KP: Is it time for a change in the approach to chemical burns? The role of Diphoterine® in the management of cutaneous and ocular chemical injuries. *J Plast Reconstr Aesthet Surg* 70: 563, 2017. [PMID: 28330646]
8. Andrews K, Mowlavi A, Milner S: The treatment of alkaline burns of the skin by neutralization. *Plast Reconstr Surg* 111: 1918, 2003. [PMID: 12711953]
9. Hunter DM, Timerding BL, Leonard RB, et al: Effects of isopropyl alcohol, ethanol, and polyethylene glycol/industrial methylated spirits in treatment of acute phenol burns. *Ann Emerg Med* 21: 1303, 1992. [PMID: 1416322]
10. Matey P, Allison KP, Sheehan MT, et al: Chromic acid burns: early aggressive excision is the best method to prevent systemic toxicity. *J Burn Care Rehabil* 21: 241, 2000. [PMID: 10850905]
11. Chan TC, Williams SR, Clark RF: Formic acid skin burns resulting in systemic toxicity. *Ann Emerg Med* 26: 383, 1995. [PMID: 7661434]
12. Williams JM, Hammad A, Cottington EC, et al: Intravenous magnesium in the treatment of hydrofluoric acid burns in rats. *Ann Emerg Med* 23: 464, 1994. [PMID: 8135420]
13. Vance MV, Curry SC, Kunkel DB, Ryan PJ, Ruggeri SB: Digital hydrofluoric acid burns: treatment with intra-arterial calcium infusion. *Ann Emerg Med* 15: 890, 1986. [PMID: 3740574]
14. Beiran I, Miller B, Bentur Y: The efficacy of calcium gluconate in ocular hydrofluoric acid burns. *Hum Exp Toxicol* 16: 223, 1997 [PMID: 9154448]
15. Yeong EK, Chen MT, Mann R, et al: Facial mutilation after an assault with chemicals: 15 cases and literature review. *J Burn Care Rehabil* 18: 234, 1997. [PMID: 9169947]
16. Amshel CE, Fealk MH, Phillips BJ, et al: Anhydrous ammonia burns. Case report and review of the literature. *Burns* 26: 493, 2000. [PMID: 10812276]
17. Hansbrough JF, Zapata-Sirvent R, Dominic W, et al: Hydrocarbon contact injuries. *J Trauma* 25: 250, 1985. [PMID: 3981678]
18. Wormser U, Brodsky B, Green B, et al: Protective effect of povidone iodine ointment against skin lesions induced by chemical and thermal stimuli. *J Appl Toxicol* 20: S183, 2000. [PMID: 11428633]
19. Schep LJ: Riot control agents: the tear gases CN, CS and OC: a medical review. *J R Army Med Corps* 161: 94, 2013. [PMID: 24379300]
20. Davis K: Acute management of white phosphorus burns. *Mil Med* 167: 83, 2002. [PMID: 11799822]
21. Ulrich D, Noah EM, Fuchs P, et al: Burn injuries caused by airbag deployment. *Burns* 27: 196, 2001. [PMID: 11226663]
22. Koh DH, Lee SG, Kim HC. Incidence and characteristics of chemical burns. *Burns* 43: 654, 2017. [PMID: 27692779]
23. Eslani M: The ocular surface chemical burns. *J Ophthalmol* 2014: 196827, 2014. [PMID: 25105018]