v. 2, n. 22, 2022

International Journal of Health Science

INVASIVE MENINGOCOCCAL DISEASE AFTER EMERGENCY SPLENECTOMY: CASE REPORT

Gabrielle Lima Alves Reis
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Geison José do Prado Ventura
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Marcos Antônio Cavalari de Souza
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Beatriz Vilacian Almeida
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Mirelle Goulart Duarte
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Octávio Marinzek Araújo
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Paula Moura Souza
Hospital de Base da Faculdade de Medicina de São José do Rio Preto
São José do Rio Preto – São Paulo

Lucas Aguiar Anchieta do Nascimento
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Lucas Fukuyama
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Renata Zorgetti Manganaro Oliveira
Hospital de Base da Faculdade de Medicina de São José do Rio Preto São José do Rio Preto – São Paulo

Abstract: Female patient, 50 years old, with a history of splenectomy after trauma 3 years before and report of appropriate vaccination. She was referred to the emergency room of a tertiary care center due to circulatory shock, initially attributed to anaphylaxis following a hair straightening procedure done 3 days prior to admission. She reported myalgia, asthenia, fever, vomiting, and diarrhea for three days, with rapid onset of purpuric plaques and areas of necrosis on the face, with progression to the back and extremities. When seeking initial care, hypotension and intense peripheral vasoconstriction with need for vasoactive drugs were identified. She was conscious and aware, without evidence of meningeal irritation. Examinations performed showed multiple organic dysfunctions in addition to laboratory markers fulfilling the criteria for DIC, which contraindicated collecting cerebrospinal fluid. Hemocultures were negative, but biopsy of a skin fragment showed the presence of Gram-negative cocci. The correlation of clinical and anatomopathological data allowed for the diagnosis of meningococcemia. The patient died after 22 days of hospitalization.
Keywords: Splenectomy, meningococcemia, meningitis, shock.

INTRODUCTION

Invasive meningococcal disease presents high mortality rates and variable clinical course. Splenectomized patients have a higher risk of developing severe forms, and should be diagnosed and treated early.

CASE REPORT

Female patient, 50 years old, with a history of splenectomy after trauma 3 years before and report of appropriate vaccination. She was referred to the emergency room of a tertiary care center due to circulatory shock, initially attributed to anaphylaxis following a hair straightening procedure

done 3 days prior to admission. She reported myalgia, asthenia, fever, vomiting, and diarrhea for three days, with rapid onset of purpuric plaques and areas of necrosis on the face, with progression to the back and extremities. When seeking initial care, hypotension and intense peripheral vasoconstriction with need for vasoactive drugs were identified. She was conscious and aware, without evidence of meningeal irritation. Examinations performed showed multiple organic dysfunctions in addition to laboratory markers fulfilling the criteria for DIC, which contraindicated collecting cerebrospinal fluid.

Hemocultures were negative, but biopsy of a skin fragment showed the presence of Gram-negative cocci. The correlation of clinical and anatomopathological data allowed for the diagnosis of meningococcemia. The patient died after 22 days of hospitalization.

LITERATURE REVIEW

Invasive meningococcal disease occurs mainly in patients newly colonized by a pathogenic strain susceptible to infection. In most cases, the initial manifestations are typical of meningitis. However, in 15 to 20% of cases the disease evolves rapidly due to meningococcal septicemia, presenting with general signs and symptoms and rapid onset of shock, in addition to signs of disseminated intravascular coagulation (DIC). The lethality rate reaches almost 50% despite adequate treatment. Among the risk factors for meningococcemia is asplenia. The chances of a fulminant infection are up to 50 times greater in these individuals, even if there is adequate vaccination for protection against encapsulated germs as recommended. Moreover, the initial clinical picture may be even more nonspecific in these patients, with a short prodromal period, and it is important that patients seek early care.

CONCLUSION

The education of splenectomized patients combined with a high degree of clinical suspicion is essential for early identification and treatment of meningococcemia.

REFERENCES

1. Durand ML, Calderwood SB, Weber DJ, et al. Meningite bacterianaaguda em adultos. Uma revisão de 493 episódios. N Engl J Med 1993; 328: 21.

2. Taha MK, Weil-Olivier C, Bouée S, et al. Fatores de risco para doença meningocócica invasiva: uma análise retrospectiva da base de dados doseguro público nacional de saúde francês. Hum Vaccin Immunother 2021; 17: 1858.

3. van de Beek D., de Gans J., Spanjaard L., et al. Características clínicase fatores prognósticos em adultos com meningite bacteriana. N Engl J Med 2004; 351: 1849.