Acute kidney injury from mushroom poisoning

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Introduction

In the event of intoxication resulting from mushroom poisoning, extracorporeal treatments, such as plasmapheresis, haemoperfusion or haemodialysis (HD) can often be required. The cases of our patients suffering from acute kidney damage caused by Orellanus syndrome are reviewed from a nurse's point of view.

Objectives

A nurse perspective on cases of patients suffering from acute kidney injury induced by the Orellanus syndrome.

Methods

A 44 year old man, who previously had no problem with his kidneys, was hospitalised with symptoms pointing to acute kidney injury. After performing the required examinations, HD treatment needed to be initiated urgently. Following a substantial and interactive questioning, it turned out that he and his parents had eaten mushrooms which they had collected themselves. The parents were also hospitalized few days later, and it was then also necessary to begin with HD treatment. Kidney biopsy was done on the patient and his mother. By analysing the samples, acute interstitial nephritis and acute tubular necrosis were determined. Because of the sudden and negative change in their family life, the patients required an intensive psychological support provided by the nurses. In order to improve their level of comfort and well-being, we always provided an opportunity for them to be treated at the same place and time. As a result of the effective cooperation with them, even the possibility of a living kidney donation arose. We familiarized the patients and their relatives with the working principles of HD, the meaning of different laboratory parameters, the required diets and the details of the lifestyle. We also informed them about the advantages and disadvantages of renal replacement therapy and kidney transplantation. All information were provided in the form of printed material, videos and personal conversations. In the second month, the 44 years old patient's mother died of pneumonia. In that very difficult situation, one of the patient's brothers decided to donate him one of his kidneys.

Cortinarius Orellanus

Sex / Age	Male / 71	Female / 66	Male / 44
Beginning of hospitalization	**02.08.2013**	**03.08.2013**	**30.07.2013**
KN (mmol/l)	46.2	55.65	39.3
Se.kreat. (μmol/l)	1825	2107	1576
Na (mmol/l)	118	126	119
K (mmol/l)	6.0	5.8	5.1
Hgb (g/dl)	12.6	11.7	12.1
GOT/GPT/GGT (U/l)	9/5/33	15/18/40	18/19/25
CRP (mg/l)	68.6	88.4	40.3
Thro. (G/l)	151	74	184
WBC. (G/l)	6.2	8.6	6.0
eGFR (ml/min)	anuria	anuria	anuria

The values of laboratory parameters at the beginning of the patients' hospitalisation

Sex / Age	Male / 71	Female / 66	Male / 44
Date of laboratory test	**02.11.2013**	**14.10.2013**	**02.11.2013**
KN (mmol/l)	19.5	20.8	23.6
Se.kreat. (μmol/l)	600	496	889
Na (mmol/l)	132	136	138
K (mmol/l)	4.5	4.7	4.4
Hgb (g/dl)	9.2	8.9	12.9
GOT/GPT/GGT (U/l)	Norm.	Norm.	Norm.
CRP (mg/l)	4.3	388	4.9
Thro. (G/l)	148	109	212
WBC. (G/l)	6.52	0.47	7.8
eGFR	8	7	6
Diuresis (ml)	anuria	900	400

The values of laboratory parameters more than two months later

Results

The patient spent 8 months in the HD program before he underwent his successful living donor kidney transplantation. The 73 years old father had also a cadaver kidney transplantation, which was successfully performed 18 months later.

The patients managed to adapt themselves to the changed lifestyle conditions. They participate in immunosuppressive therapy controlled by specialists. It is very important for us to see the patient's satisfaction rate and to get feedback about their status.

Conclusion

In the case of acute kidney injury, which occurs unexpectedly, the nurses performing dialysis treatments play a key role in providing mental and psychological support for patients. In order to reduce the patient's vulnerability and insecurity, we always had to provide clear and thorough information about all necessary therapies. Furthermore, effective teamwork and patient's compliance were also essential for establishing a successful cooperation between the patient and the nursing staff.

References

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2. *https://www.bing.com/images/search?q=cortinarius+orellanus&FORM=HDRSC2*