CLINICAL RESEARCHES IN FOOD POISONING CAUSED BY SALMONELLA SPP. AT HUMANS

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Abstract

Food toxiinfections caused by Salmonella spp. are among the most common diseases of food-type afecting man after the consumption of infected water or food. Any type of food can be contaminated with this bacterium. Food toxiinfections caused by Salmonella spp. are acute diseases, which usually manifests as a clinical picture of acute febrile, often gastroenterocolit;it occures as a result of ingestion of food contaminated with bacteria, bacterial toxins, toxic metabolites or microbial. Depending on the etiology, the clinical picture is dominated by the occurrence or appearance of the toxic.

Key words: Salmonella spp., human, clinical symptoms, diagnostic, treatment.

INTRODUCTION

The toxiinfections in food caused by Salmonella spp. usually occur in epidemics, the people who ate the same contaminated food and, more rarely, in the form of isolated cases. Frequently involved in producing foods toxiinfections with Salmonella are: meat and meat products, eggs and egg products, milk and milk derivatives, fish and cakes.

The disease starts with nausea, abdominal colic, vomiting and feverish state. Gradually, appears increasingly softer stool, common (on average 4-6 in 24 hours). The look is of chil's quality under the intestinal flora of putrefaction, parent process without water in the colon (transit is accelerated as a defense mechanism. In a variable but quite frequently cases is associated with repeated vomiting, extremely torturous.

At extreme ages and at people with known immune deficiency the evolution can be even more severe, with high degree of dehydration, to collapse. Spontaneous or therapeutic measures, remission is relatively slow (24-48 hours), the longest being the convalescence and marked by fatigue, less appetite and an undefined malaise. After the illness the body will spontaneously get rid of the Salmonella spp. (a few days), but in more than 20 of the cases it is possible to extend the asymptomatic state, which may take more than six months.

Cardiovascular changes in toxiinfections with Salmonella spp. as a rule are: bradycardia with hypotension and cardiac dephness noise pressure. Anemic syndrome is severe and prolonged in the forms. Hemorrhagic syndrome manifested by abnormal uterine bleeding, epistasis, gumyvoragies

and is caused by thrombocytopenia, hipovitaminosis K and/or coagulopatia consume.

Diagnosis of food toxiinfection caused by Salmonella spp. is based on clinical examination anamnesis, epidemiological and laboratory analysis for etiologic diagnosis. Treatment in these diseases produced by Salmonella spp. is rebalancing, antiemetics, hydroelectrolitic, antibioterapy, diarrhea diet food.

MATERIALS AND METHODS

Research on the present work is based on a retrospective study, which includes a number of 287 cases of food-borne Salmonella spp. during the period 2009-2013 at the Hospital for Infectious Diseases in Oradea. The study takes as given the observation sheets within the hospital archives taken into account all existing folders, cases of which 157 and 130 men, women patients are of all ages.

Patients were tracked only during hospitalization, in most cases there's no need for rehospitalization control. In terms of the geographical distribution of cases, they belong to Bihor County, cases both in urban and in rural areas. The cases considered in the study were tracked in terms of symptoms, diagnosis, treatment and hospitalization period.

RESULTS AND DISCUSSIONS

Analysis of symptoms caused by food toxiinfection caused by Salmonella spp. for the period 2009-2013, we can see that the increased clout of diarrheal stools watery/bloody (256 cases), followed by fever (157 cases), nausea (144 cases) and vomiting (136 cases). Of all the symptoms listed in the report forms to diagnose patients with food-borne Salmonella spp. caused by the low encounter pain anal, anal itching, hypothermia and lipotimia.

Table 1.

The incidence of salmonelloses symptoms at the patients at the Infectious Diseases Hospital Oradea, for the period 2009-2013

SYMPTOM / YEAR	**2009**	**2010**	**2011**	**2012**	**2013**	**TOTAL**
INAPPETENCE	4	30	5	4	5	**48**
SHIVERS	6	40	23	10	24	**103**
NAUSEA	19	47	41	4	33	**144**
VOMIT	20	44	38	6	28	**136**
DIARRHEA	44	93	54	15	50	**256**
CEPHALALGIA	15	52	12	4	15	**98**
DIZZINESS	9	47	9	2	3	**70**
FEVER	24	54	34	8	37	**157**
ABDOMINAL CRAMP	18	23	17	4	7	**69**
ASTHENIA	13	-	20	6	12	**51**
COUGH	2	-	9	2	3	**16**

ABDOMINAL PAIN	15	-	33	4	21	**73**
CONVULSION	2	6	6	2	15	**35**
GENERAL STATUS AFFECTED	3	27	-	-	7	**37**
DEHYDRATION SYNDROME	2	76	-	-	-	**78**
PALLOR	3	5	-	-	-	**8**
DEHYDRATION	3	82	-	2	3	**90**
ANAL PAIN	1	-	-	-	-	**1**
ANAL PRURITUS	1	-	-	-	-	**1**
DYSURY	1	3	-	-	-	**4**
TYMPANITES	1	4	1	1	2	**9**
LIPOTHYMY	1	-	-	-	-	**1**
HYPOTERMIA	1	-	-	-	-	**1**
MYALGIA	2	4	4	1	3	**14**
PERSPIRATION	-	6	-	-	-	**6**
DYSPNOEA	-	4	-	-	-	**4**
EPIGASTRIC PAIN	-	3	3	3	16	**34**
DYSPHAGIA	-	-	6	-	-	**6**
OLIGURIA	-	-	-	1	7	**8**

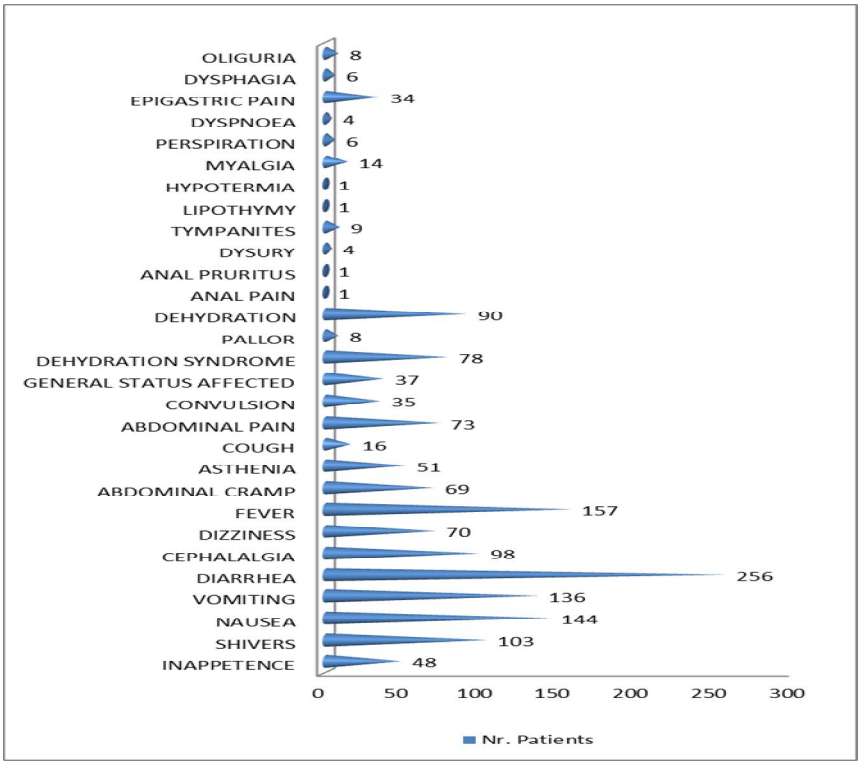

Fig. 1. Within the total number of cases with salmonellozes representing the symptoms of the patients hospitalised at the Hospital for Infectious Diseases in Oradea, for the period 2009-2013

Analyzing the figure it is found that in the years 2009-2013 most food-borne cases caused by Salmonella spp. has been presented with the following symptoms: watery diarrheal stools, fever,nausea and vomiting.

Diagnosis within 72 hours reveals that all of the 287 cases, presents simple gastroenteritis Gr. II or II-III, and a secondary diagnosis (complications) vary according to the diagnosis at admission, so we encounter:

- acute syndrome of dehydration
- reactive hepatitis
- prostate adenoma
- obesity
- diabetes
- kidney failure
- colecitopatie
- lambliazes
- hypocalcemia
- acute streptococcal angina
- pancreatitis
- intestinal parasitosis
- toxoplasmosis
- arterial hypertension
- hyperglycemia

Depending on symptomatology and diagnosis the doctor decides the treatment of each patient. In the case of observations to diagnose patients with toxiinfection caused by Salmonella spp. are found the following medicinal substances used in the treatment of:

Table 2.

Medicinal substances used in the treatment of food toxiinfections with Salmonella spp.

PERFUSION SOLUTIONS	*Physiological saline solution*
	Ringer lactate
	Dextrane
	Glucose 5%
ANTIBIOTICS	*Metronidazole*
	Biseptol
	Ampicillin
	Amoxicillin
	Augmentin
	Cephalexin
	Ciprocin
	Azitrox
ANTISEPTICS	*Saprosan*
ANTIDIARRHEAL SUBST.	*Biotics*
	Furazolidone
LIVER FOOD	*Essentiale Forte N*

In addition to drug treatment toxiinfection diseases caused by Salmonella spp., should rest and diet, hygienic treatment.

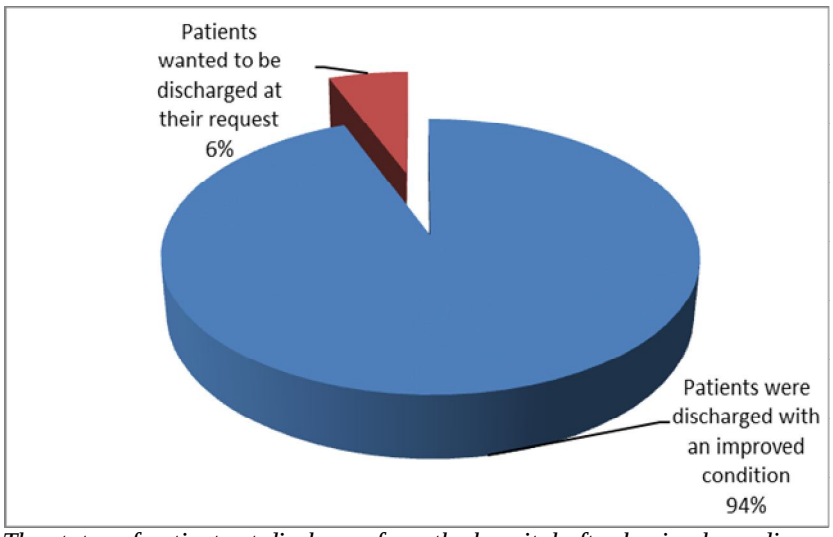

Fig. 2. The status of patients at discharge from the hospital after having been diagnose with food-borne Salmonella spp. produced at the Infectious Diseases Hospital, Oradea, for the period 2009-2013

In most cases patients are extermined with a better state of being, or they can be extern at their request. Of the 287 cases researched which were hospitalized at the infectious diseases hospital, Oradea, 270 patients (94%) were discharged with an improved condition for receiving appropriate diet or restoration of organism, respectively 17 patients (6%) wanted to be discharged at their request following also an appropriate diet.

CONCLUSIONS

From the incidence of symptoms caused by salmoneloze we can see that the increased clout of aqueous/bloody diarrheal stools followed by fever, nausea and vomiting.

Protecting consumers is done through compliance with the measures pertaining to General rules on hygiene, destruction of vectors and rodent proof, thus preventing the outbreak of epidemics in public nutrition.

Food toxiinfections products of Salmonella spp. can be prevent through careful preparation in hygienic conditions of food.

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