

EVALUATION OF CLINICAL
CORRELATIONS OF PATIENTS WITH
BLASTOCYSTIS AND/OR
DIENTAMOEBIA FRAGILIS

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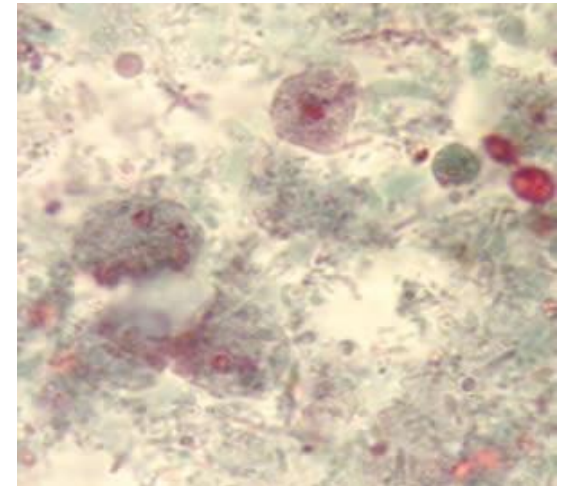
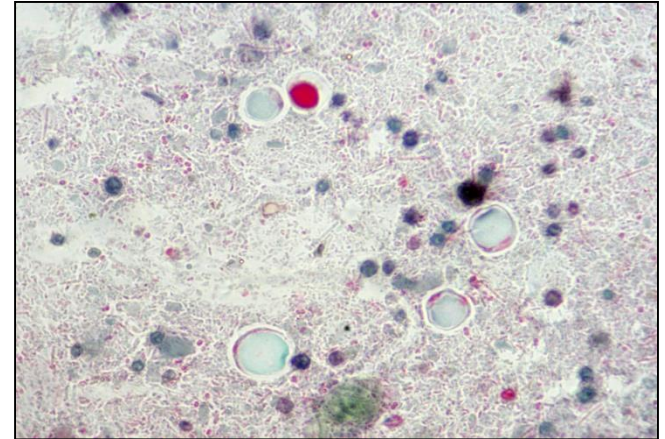
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AIM

- TO:
- Question their pathogenicity
- Investigate the frequency of their symptoms individually
- Identify coinfecting intestinal parasites
- Compare the age and gender of the patients



METHOD



- Retrospective study
- July 2015-June 2016 → one year period
- 6827 patients' stool samples
- Trichrome staining
- Evaluation of clinical outcome

METHOD

- Groups according to presenting complaints
 - gastrointestinal
 - allergic
 - immunological
 - psychiatric



METHOD

- Statistical analysis
 - p value $\leq 0,05$
 - one sample chi square test



RESULTS

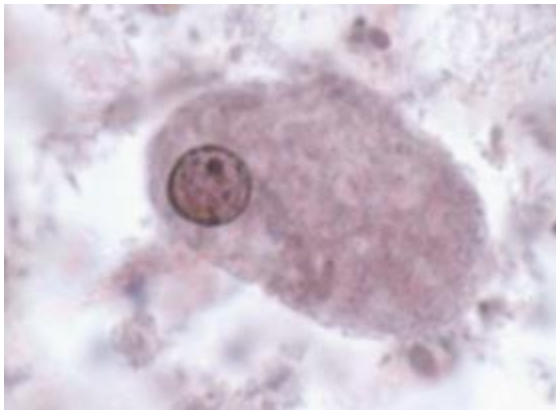
- 6827 patients

<i>Blastocystis</i>	801 (11,73%)
<i>Dientamoeba fragilis</i>	166 (2,43%)
<i>Entamoeba coli</i>	56 (0,008%)
<i>Giardia lamblia</i>	22 (0,003%)
<i>Enterobius vermicularis</i>	4
<i>Iadomoeba butschlii</i>	2
<i>Entamoeba hartmannii</i>	1

RESULTS

- **Coinfections with *Blastocystis***

- *D. fragilis*: 93
- *E. coli*: 26
- *G. lamblia*: 11



- **Coinfections with *D. fragilis***

- *B. hominis*: 93
- *E. coli*: 6
- *G. lamblia*: 2



RESULTS

- Clinical outcome with *Blastocystis* ($p \leq 0.01$)

Allergic	402 (50,19%)
Gastrointestinal	322 (40,20%)
Immunological	56 (6,99%)
Psychiatric	4 (0,50%)



Urticaria

RESULTS

Gastrointestinal complaints

Abdominal pain	95
Diarrhea	45
Loss of weight and/or growth retardation	41
Nausea and vomiting	22
Constipation	20
Anal itching	18
Tiredness and weakness	12
Inflammatory bowel disease (diagnosed)	7
irritable bowel syndrome (suspected)	6

RESULTS

Allergic symptoms

Urticaria and/or angioedema	331
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Drug allergy	27
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Allergic rhinitis	12
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Food allergy	10
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Allergic cough	8
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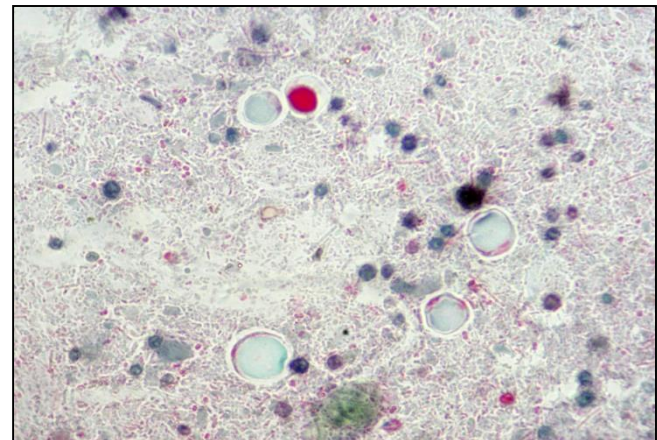
Allergic asthma	5
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Immunological disorders

Autoimmune diseases	23
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Immunocompromising patients	21
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Immunodeficiencies	12
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RESULTS

- Clinical outcome with *D. fragilis* ($p \leq 0.01$)

Gastrointestinal 98 (59,04%)

Allergic 63 (37,95%)

Immunological 10(6,02%)

Psychiatric 2 (1,20%)



RESULTS

Gastrointestinal complaints

Abdominal pain	25
Diarrhea	19
Loss of weight and/or growth retardation	14
Constipation	9
Nausea and vomiting	7
Anal itching	6
Irritable bowel syndrome (suspected)	3
Inflammatory bowel syndrome (diagnosed)	2
Lack of appetite	2

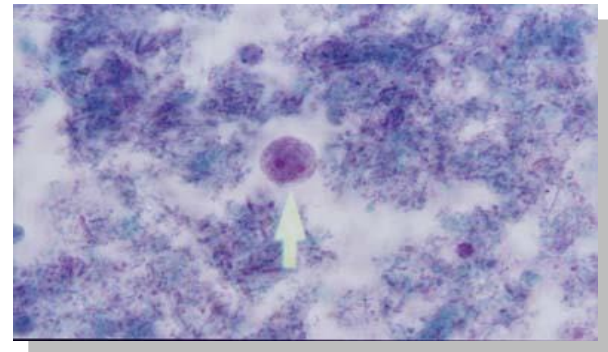
RESULTS

Allergic symptoms

Urticaria and/or angioedema	49
Drug allergy	8
Allergic rhinitis	5
Food allergy	1

Immunological disorders

Immunocompromising patients	4
Autoimmune diseases	2
Immunodeficiencies	2



RESULTS

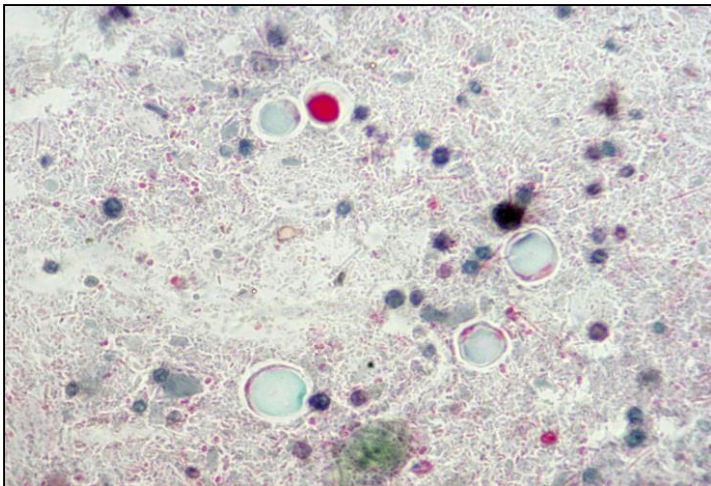
Blastocystis - age and gender

	FEMALE	MALE	SUM
0-20	108	115	223
21-40	173	133	306
41-60	126	76	202
60+	36	34	70
SUM	443	358	801

D. fragilis- age and gender




	FEMALE	MALE	SUM
0-20	29	26	55
21-40	36	14	50
41-60	29	19	48
60+	6	7	13
SUM	97	69	166

CONCLUSION



- the most common parasites in our laboratory
- wide range of symptoms especially gastrointestinal and allergic
- can be affected from the immunological condition of the patients

CONCLUSION

- Development of diagnostic methods
 - helminths  intestinal protozoa
- Allergic symptoms  association of citylife with atopic diseases
- Immunological disorders  modern way of living
 - Autoimmune diseases
 - Cancers
 - Sexually transmitted diseases
 - Immunosuppressive drug use