

ثالثاً.

Autism

: _____ -1-3

1943 *Kanner* ()

() [46]
autism) ASDs

[47] .(spectrum disorders

() 10.000

: _____ -2-3

[47].

-
-
-

()
" "
[48]

[47]

X

Tourette

%30-20

tuberous sclerosis

[47]

: _____ -3-3

[47]

-
-
-
-
-
-
-

"

(DSM-IV, ICD-10) "

(2008- - - -) X e

: _____ -4-3

celiac disease / .1

- .1
- .2
- .3
- .4
- .5
- .6

: _____ -1-4-3

.corticosteroid

ACTH

.ACTH (Naloxone)

[49]

LH

Dipeptidyl peptidase IV (DPP IV)

A. Friedman

serine peptidase

.() casomorphine

() dermorphin

[50]

[49]

: _____ -2-4-3

Reichelt () Sutherland

Shattock

Casein Gluten

() Oslo

α -gliadin .gluteo-morphine caso-morphine

α -gliadin

.D C

[51]

adynylate cyclase

cAMP

tryptophan hydroxylase :

[51,49]

IAG

cAMP

carnitine palmitotranferase

: **-3-4-3**

Waring 1993

[52] (sulphur-transferase)

sulphur-transferase

bufotenin

(5-HT)

()

[49]

(Epsom salt)

[49]

INF γ

.natural killer cells

[49]

: **-4-4-3**

myelin basic protein (anti-MBP)

.neuron-axon filament protein (anti-NAFP)

%3

%7

MBP

%58

.Down syndrome

% 0

%22

NAFP MBP (HHV-IgG) (measles-IgG)
[49].(2)

[49] :2

%90	MBP	IgG
%73	NAFP	IgG
%84	MBP	IgG
%72	NAFP	IgG

SLE

rheumatoid spondylitis thyroid
 [49]. : multiple sclerosis IDD rheumatoid arteritis
 . 5-4 : ●
 rubella : ●
 . : ●
 .(6) MHA : ●
 . : ●

: -5-4-3

(measles-mumps-rubella vaccine) MMR
 (Food and drug association) FDA [53]
 " [54] : (Institute of Medicine's) IOM
 . MMR

"

[54]

-6-4-3

[55]

(راجع الجدول 3-ج في الملحق ج).

3

[56]

[55]

:3

Chromosome	IMGSAC, 1999	Phillippe et al., 1998	Risch et al., 1998	CLSA, 1999
1p			2.15	
2q	0.52	0.64		
6q		2.23		
7q	2.53	0.83	0.93	2.20
13q			0.68	3.00
16p	1.51	0.74		
18q		0.62	1.00	
19p	0.99	1.37		

(gamma-aminobutyric acid receptor subunit beta3) (GABRB3) GABA 3

7

HOXA1

SLC25A12

[57]

[58].2q31

/

x

-5-3

X

.autistic-like

%16 - %2.5

X

.([52] [59])

ASDs

X

X

%21

[60]

mGluR5

mGluR5

FMRP

FMRP

[61]

()

: -6-3

)

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(Vit B12 Vit B6)