

Epidemiological pre-study about nodule search for the Somatoinfra functional anatomic research tender „GOP – 2011 – 1.1.1 Somatoinfra“

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The Somatoinfra epidemiological research in nodule search achieves the actual measurement of a quantum biology phenomena, with the help of imaging resulting from natural human radiation. The relative intensity difference of the emitted electromagnetic radiation measurable in the infrared (IR) spectrum, represents the size, intensity, and the extent of the nodule.

Based on a detailed study of the Somatoinfra technology, the suggested guidelines for the processing of the results of the epidemiological research regarding the „GOP – 2011 – 1.1.1 Somatoinfra” tender’s nodule search section, are the following:

- To consider the epidemiological aspect of a study of an age group or a population, such as 14-18 years old activ athletes (see Table 1 and Table 2).
- Research and examination of nodules in a population, associated with employment type (see Table 3).
- Detection and possible diagnosis of latent nodules and their connection to existing diseases (see Table 4).
- Study of the density of nodule occurences examined in 34 different regions, of the type of nodules, their association with other diseases, and the occurrence of sinus maxillaris nodules during retrospective examinations in teenager boys, and the occurrence of alopecia areata (see Table 5 and Table 6).
- Identification with Somatoinfra technology of commonly occurring types of nodules in the regions that were not yet studied, such as the formation of abscesses in soft tissue due to previous injections.
- Nodule-like physiological processes, such as chronic urinary tract infection, not tied to a specific region.
- The epidemiology of the impact of untargeted and high dosage antibiotic treatment prescribed without culturing bacteria collected from nodules, as well as the reappearance of mutant bacteria resulting from targeted antibiotic treatment. Also, what kind of antibiotic therapy is needed to cure secondary bacterial infection resulting from the treatment of primary sepsis. Especially considering fungal infestation following secondary bacterial infection.
- In the case of nodule formation, the importance of monitoring the current immune response in the examined patient.
- The appearance of nodules in case of epidemics and pandemics.

- Nodule search with Somatoinfra technology is indispensable in hospitals of developed countries, to localize and treat against drug-resistant „super bacteria”. For example, the case of a mutant E. Coli, in Germany.
- Specific attention should be given to viral infections, where it is crucial to examine the patient’s immunity related to the patient’s age and sex. This is indispensable from the healing aspect.
- It is of benefit for the research to discover if a given patient has been previously infected with the same microbe. If yes, was the patient treated with medicaments or did the immune response heal the patient. Taking retrospective data into consideration, there is evidence to suggest that healed patients who were not treated with medicine and were once again infected by a similar pathogen, had an efficient immune response. As another example, in case of a snakebite the first bite is critical generating an efficient immune response in successive bites (see Table 7).

TABLES

Age (years)	Number of cases (N)	Percent (%)
14		
15		
16		
17		
18		

Table 1. Prevalence of nodule cases in 14 to 18 year old, athlete boys. Based on the guidelines of the GOP research tender, Hungary, 2014.

Age (years)	Number of cases (N)		Total (N)	Percent (%)
	Boy	Girl		
14				
15				
16				
17				
18				

Table 2. Number of nodule cases in 14-18 year old teenagers, divided by sex. Based on the guidelines of the GOP research tender, Hungary, 2014. The total number of positive cases and the percent by age are also shown.

Occupation	Age group (years)	Man (N)	Woman (N)	Total (N)
x	0-19			
	20-29			
	30-39			
	40-49			
	50-59			
	60-69			
	70+			
y	0-19			
	20-29			
	30-39			
	40-49			
	50-59			
	60-69			
	70+			
z	0-19			
	20-29			
	30-39			
	40-49			
	50-59			
	60-69			
	70+			
zs	0-19			
	20-29			
	30-39			
	40-49			
	50-59			
	60-69			
	70+			

Table 3. Nodule search in population tied to occupation. Number of cases are separated in 10 year groups and are divided by sex. Based on the guidelines of the GOP research tender, Hungary, 2014. Occupation types are chosen purposely to highlight...

Diseases	Number of cases (N)		Total (N)	Percent (%)
	Man	Woman		
Diabetes				
Vitamin deficiency				
Mineral deficiency				
Alopecia				
Depression				
...				
...				
...				
...				
...				
...				
...				
...				
...				
...				
...				
...				

Table 4. Connection between existing diseases and latent nodules that have a possible diagnosis. Number of cases are divided by sex. Based on the guidelines of the GOP research tender, Hungary, 2014.

Diseases	Woman		Diseases	Man	
	Typical nodules	Number of cases (N)		Typical nodules	Number of cases (N)
X	1		X	1	
	2				
	3				
	4				
	5				
	6				
	7				
...		...			
Y	1		Y	1	
	2				
	3				
	4				
	5				
	6				
	7				
...		...			
Z	1		Z	1	
	2				
	3				
	4				
	5				
	6				
	7				
...		...			
Zs	1		Zs	1	
	2				
	3				

4	4
5	5
6	6
7	7
...	...

Table 5. The density of nodule cases and the connection with other diseases in the analysis of retrospective examinations, separately in women and men. Based on the guidelines of the GOP research tender, Hungary, 2014.

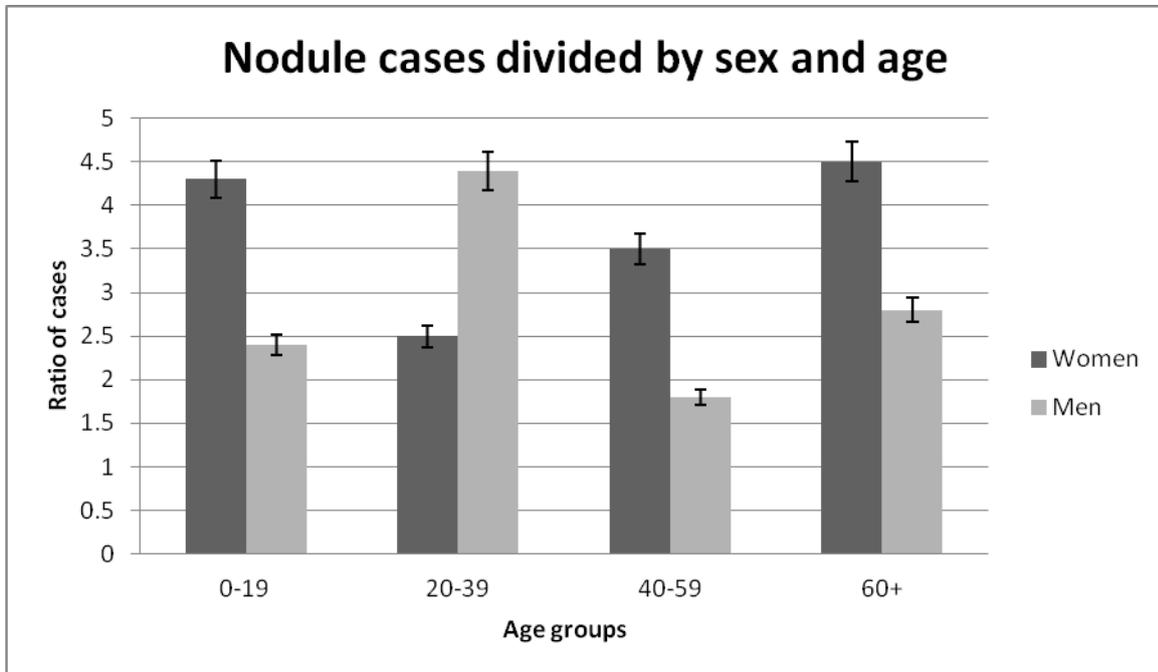
Identification number	Alopecia Areata		Maxillary sinus infection		Other diseases	
	Yes	No	Yes	No	Yes	No
12345						
67890						
63565						
39455						
11111						
66666						
22222						
33333						
44444						
55555						
77777						
88888						
99999						
00000						
00001						
00002						
54245						
56325						
09253						
56732						
09432						
50291						
...						

Table 6. Nodule cases in the maxillary sinus of teenage boys, appearing during the analysis of retrospective examinations, as well as the appearance of Alopecia Areata. Based on the guidelines of the GOP research tender, Hungary, 2014.

Previously infected with similar pathogen		Type of treatment in case of previous infection		Number of cases (N)
Yes (N)	No (N)	With medicaments (N)	Own immune system (N)	

Table 7. Nodule cases in patients who were previously infected with similar pathogens, divided by type of treatment (medicaments or immune system). Taking retrospective data into consideration, there is evidence to suggest that patients healed without taking medication had a more efficient immune response in subsequent infections with similar pathogens. Based on the guidelines of the GOP research tender, Hungary, 2014.

GRAPHS



Graph 1. Nodule cases in women and men, separated into age groups, based on the guidelines of the GOP research tender, Hungary, 2014. Ratio of cases and error bars are included. Final proportion of cases is% in the analysed region (n=....). Percent of cases in men (...%, n=...) is higher then that in women (...%, n=...).

Table 1. Colorectal cancer testing trends by gender

	Home FOBT within past year				Sigmoidoscopy within 5 y	
	Males		Females		Males	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Totals	4,692	16.1 (14.8-17.5)	6,856	15.3 (14.3-16.5)	4,622	7.6 (6.7-8.5)
Race						
White	4,026	16.2 (14.8-17.7)	5,795	15.3 (14.1-16.5)	3,983	7.6 (6.7-8.6)
Black	530	18.1 (14.2-22.8)	881	15.1 (12.8-17.7)	506	7.6 (5.1-11.3)
Other	136	8.7 (4.6-15.8)	180	17.6 (10.8-27.2)	133	5.6 (2.6-11.4)
Hispanic or Latino						
Yes	514	12.3 (8.4-17.7)	777	10.1 (7.7-13.2)	504	4.0 (2.3-6.9)
No	4,178	16.4 (15.1-17.8)	6,079	15.7 (14.6-17.0)	4,118	7.8 (6.9-8.8)
Age (y)						
50-64	2,793	14.2 (12.6-15.9)	3,582	13.6 (12.3-15.0)	2,772	7.0 (6.0-8.2)
≥65	1,899	19.3 (17.2-21.5)	3,274	17.6 (16.1-19.3)	1,850	8.5 (7.2-10.1)
Education						
<High school	1,011	12.2 (10.0-15.0)	1,625	11.4 (9.7-13.5)	968	3.5 (2.4-5.1)
High school graduate	1,320	15.4 (13.2-17.9)	2,221	14.5 (12.8-16.5)	1,299	5.0 (3.8-6.5)
Some college	1,078	16.6 (14.3-19.2)	1,712	17.0 (14.8-19.4)	1,072	8.0 (6.5-10.0)
College graduate	1,238	19.2 (16.6-22.1)	1,220	19.3 (16.8-22.0)	1,235	12.3 (10.3-14.6)
Annual household income*						
<\$20,000	1,117	13.9 (11.5-16.6)	2,491	12.2 (10.7-13.9)	1,084	3.3 (2.3-4.9)
\$20,000-34,999	1,094	14.3 (11.9-17.0)	1,613	15.0 (13.1-17.2)	1,073	5.6 (3.9-8.0)
\$35,000-54,999	933	17.7 (14.9-20.9)	1,144	16.8 (14.2-19.8)	925	7.5 (5.7-9.7)
\$55,000-74,999	544	15.6 (12.0-19.9)	593	14.4 (11.2-18.3)	539	8.1 (5.6-11.7)
≥\$75,000	1,004	18.1 (15.1-21.4)	1,015	19.0 (16.3-22.0)	1,001	11.6 (9.4-14.3)
Marital status						
Married	2,784	17.2 (15.7-18.9)	2,699	16.3 (14.8-18.0)	2,757	8.1 (7.0-9.3)
Unmarried	1,892	13.1 (11.3-15.1)	4,131	14.1 (12.9-15.5)	1,849	6.1 (4.9-7.4)
Health coverage						
None	396	4.1 (2.3-6.9)	535	5.3 (3.5-7.8)	385	1.6 (0.7-3.6)
Public	811	17.9 (15.0-21.2)	1,642	14.2 (12.1-16.5)	800	5.8 (3.9-8.5)
Private	3,475	16.9 (15.4-18.5)	4,662	16.7 (15.4-18.1)	3,428	8.4 (7.4-9.6)
Usual source of care						
Yes	4,233	17.3 (15.9-18.7)	6,451	15.9 (14.7-17.0)	4,176	8.1 (7.2-9.1)
No (ER included)	454	2.9 (1.5-5.5)	401	6.7 (4.1-10.6)	442	1.5 (0.6-3.3)
Seen or talked to a general doctor (men and women)						
Yes	3,584	19.1 (17.5-20.7)	5,611	16.8 (15.6-18.0)	3,527	8.3 (7.4-9.4)
No	1,108	5.8 (4.5-7.5)	1,240	8.7 (7.0-10.9)	1,094	4.9 (3.6-6.7)
No. physician visits in past year						
None	728	2.8 (1.5-5.2)	599	2.4 (1.4-4.0)	719	3.7 (2.4-5.8)
One	624	12.1 (9.5-15.4)	731	10.6 (8.5-13.1)	612	5.7 (3.9-8.1)
2-5	1,928	18.1 (16.0-20.3)	2,833	16.5 (15.0-18.3)	1,892	8.9 (7.5-10.4)
≥6	1,378	21.3 (18.8-24.1)	2,639	18.4 (16.6-20.3)	1,365	8.5 (6.9-10.4)
Mammogram within past 2 y						
Yes	0	NA	4,797	19.6 (18.2-21.1)	0	NA
No	0	NA	1,984	4.4 (3.4-5.6)	0	NA
Papanicolaou smear within past 3 y						
Yes	0	NA	4,683	18.4 (17.0-19.8)	0	NA
No	0	NA	2,048	8.4 (7.1-10.0)	0	NA
PSA within past year						
Yes	1,912	26.5 (24.1-29.0)	0	NA	1,883	11.8 (10.2-13.7)
No	2,630	8.0 (6.9-9.4)	0	NA	2,595	4.3 (3.6-5.3)
Smoking status						
Never	1,761	14.2 (12.2-16.5)	4,037	15.1 (13.7-16.6)	1,735	7.8 (6.4-9.5)
Former	1,990	18.6 (16.7-20.7)	1,787	18.6 (16.5-21.0)	1,964	8.2 (7.0-9.6)
Current	923	14.3 (11.9-17.2)	1,003	10.4 (8.2-13.1)	905	5.6 (4.1-7.5)

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Current	923	14.3 (11.9-17.2)	1,003	10.4 (8.2-13.1)	905	5.6 (4.1-7.5)

NOTE: Data are from NHIS 2003; counts, weighted percentages, and 95% confidence intervals. Respondents are men and women ages 50 years and older who have never been diagnosed with colorectal cancer. n denotes the actual number of valid NHIS 2003 respondents and % denotes the weighted percentage of respondents with a recent test. Subjects who received a proctoscopy in the past 5 years are excluded from analysis. Values in boldface indicate a significant difference between males and females.

Abbreviations: 95% CI, 95% confidence interval; ER, emergency room; NA, not applicable.

*Missing incomes are imputed via The National Center for Health Statistics NHIS 2003 Imputed Family Income Files.