

Internet (Google) and Pediatric Dermatology. 5 new functions that have to be known.

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The extensive usage of Internet changed in the last 10 years several aspects of the medical work. Today physicians cannot perform scientific research and probably cannot treat patients without consulting on real time the Medline database, without reading full text reports from on line journals and without electronic mail. These gestures, which seem expected today, could not be even predictable a few years ago. This could mean that we have to expect many other changes in the near future.

Waiting for future changes, we should try to use the enormous amount of scientific news already present in the net in the best and most comfortable way. This report is aimed at presenting and commenting on to Pediatricians and Dermatologists some new functions of research already available free of charge on the net, but not much used by Physicians.

Scholar. This particular function is supplied as well as many others from the research engine Google (<http://scholar.google.com>). By entering the name of an Author this function allows to search all his reports present in the net and, interesting enough, how many times each report is cited in the Web. Knowing the reports of a given Author was already possible in the past by whatever research engine and also by a research in Medline. The latter, however, does not consider the non indexed journals. Moreover, searching for quotation of a given report in other reports, thus the impact of that given report, was not possible in the past without controlling one at a time all the links of a rough research. Typing for instance the name of the authors of an article (Cutrone, Grimalt) we obtained the results as follows: *The True and the False: Pixel-Byte*

Syndrome M Cutrone, R Grimalt - Pediatric Dermatology, 2001 - blackwell-synergy.com The possible use of retouched images for fraudulent purposes in scientific articles, posters, and conferences is not a future but a present ... Cited by 2. Clicking on "Cited by 2" we immediately obtained the link to the relevant reports where the article is quoted.

Images search. Consulting clinical images with the aim of studying, comparing or teaching changed very rapidly. The paper atlas was replaced by an atlas on digital support and the latter in turn was replaced by on line atlas. The latter can be updated on real time. However, also an on line atlas needs technical time to be updated. This is why pediatricians and dermatologists always more frequently go and take the images where they found those one in the Web, on institutional sites or not, using the images search engines. The latter proved to be rapid, reliable and in effect devoid of advertising images.

Almost all the most well-known research engines have their specific research function. However, only some of them allow to round off the research inserting filters. Google, for instance (http://www.google.com/advanced_image_search?hl=en), allows to choose the type of file (for instance jpg) and the size, ruling out thumbnail sized images, which cannot be used due to their scarce quality. Moreover, Altavista (<http://it.altavista.com/image/default>) allows in a very intuitive manner to rule out usually advertising banners and to choose between outlines and photos.

On the other hand, searching for clinical images within "peer to peer" programs is absolutely unuseful. We tested with 3 different key words,

namely atopic dermatitis, lichen striatus, subcutaneous fat necrosis, two of the more popular files of file sharing (Bearshare, Winmix), obtaining 0 images. This was a predictable result because the programs of file sharing are used to share movies and mp3 files. However, the result of a research with programs of file sharing depends on the number of computers connected in a given moment to the peer to peer program and thus it significantly changes with time.

Define. The function “define” of Google is absolutely new. Typing “define” followed by a given word, we obtain its definition, extrapolated from the Web, as if we consulted a dictionary. A normal research with whatever search engine could lead to the same definition but very slowly. However, we tested this function with the key words “subcutaneous fat necrosis” and “lichen striatus” obtaining 0 as result. On the other hand, when we tested the function define with “atopic dermatitis” the research was successful resulting in 7 right definition, for instance “A chronic inflammatory genetically determined disease of the skin marked by increased ability to form reagin (IgE)” etc..

Print. The function “print” is yet in the “beta” version, namely provisional, but it will surely become very popular (<http://print.google.com/>). It is included in a very ambitious program of Google, namely making available in the net, after scanning, all the books published throughout the world. Although today this function can only be used in a rough manner (for instance choosing the language is not possible), the result is very surprising. For instance, typing subcutaneous fat necrosis, which is not a common disorder, we were able to display really 270 titles of different books, that mentioned in some way this topic.

Each book is displayed with the “thumbnail image” of its cover. Clicking on the title of a given book, its pages regarding the specific topic appear (only those ones and not all its pages) and the pages include photos. Due to copyright, it is not possible to print the pages nor to save them on the hard disk, because the right key is disconnected. Regardless of copyright problems (disconnection of the right key can be easily bypassed using the key print of the

menu and then saving as jpg image), the idea is very good and the function “print” useful and impressive. The possibility of having at one’s disposal also the contents of all the printed books throughout the world, besides articles and web pages, brings today the world wide web nearer to the galactic library, containing all the human knowledge, preconized by Isaac Asimov in his books of science-fiction.

File type. When searching for scientific articles, often obtaining full text copies free of charge is difficult. To speed up and make perfect a research, restricting it to the really and free of charge full text articles, you can only ask for pdf articles, which are normally complete. The modality of this research is very simple, because you have only to add to the object of the research “filetype:pdf”. The test carried out using this filter gave very good results as follows: 86,300 for atopic dermatitis filetype:pdf. (0.12 seconds), 388 for lichen striatus filetype:pdf. (0.45 seconds) and 37,200 for subcutaneous fat necrosis filetype:pdf. (0.26 seconds).

For teaching purposes you can also select files in powerpoint, usually related to lectures of congresses or university lessons. We obtained with the same key words the results as follows: 121 for subcutaneous fat necrosis filetype:ppt. (0.91 seconds), 3 for lichen striatus filetype:ppt. (0.19 seconds) and 247 for atopic dermatitis filetype:ppt. (0.29 seconds).

In conclusion the scientific material available in internet is really unlimited today. In spite of this, the scarce knowledge of the functions of the search engines could make the electronic activities useless and frustrating for the physicians. We presented 5 new functions of internet search engines probably not very known to Pediatricians and Dermatologists, but useful to make simply and efficient their researches.

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