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The rôle of second opinion in oncology: an update

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Summary. It has been demonstrated that second opinion (SO) in medicine and surgery may influence the diagnosis, as well as treatment and prognosis; in fact, the patient may achieve treatment optimization and avoid unnecessary risks and costs. Most of the studies reviewed in this editorial evaluated the benefits of second opinions and the reasons on which the patients seek a medical SO in oncology. SOs are, in fact, pretty common in cancer care with most patients motivated by the need for improved communication, additional information and reassurance. Also the Web has become a relevant partner in this procedure, but to avoid the unpleasant "Web Babel Syndrome", it is necessary an easy access to SO consulting medical offices.

Key words: second opinion, oncology, update, benefits, Web Babel Syndrome

«Ruolo del "secondo parere" in oncologia: un aggiornamento»

Riassunto. È stato dimostrato che il "secondo parere" influenza non solo la diagnosi, bensì il trattamento nonché la prognosi; il paziente di fatto può beneficiare di una ottimizzazione dell'approccio terapeutico ed evitare rischi e costi non necessari. La maggior parte degli studi citati in questo editoriale hanno valutato i vantaggi derivanti dal secondo parere, nonché le ragioni che motivano il paziente alla ricerca di un ulteriore responso medico. La ricerca di tale consulto è comune in oncologia a causa della necessità da parte del paziente di una migliore comunicazione, maggiori informazioni e soprattutto rassicurazione e sostegno psicologico. Anche l'utilizzo del Web ha acquisito un ruolo sempre più importante, ma la ricerca ossessiva di pareri ed informazioni senza alcuna formazione o esperienza clinica spesso conduce alla nota "Sindrome di Babele del Web" che può e deve essere evitata garantendo facile accesso ad un secondo parere.

Parole chiave: secondo parere, oncologia, aggiornamento, benefici, Sindrome di Babele del Web

Medical second opinion (SO) means the process through which it is possible to consult any available medical institution or a single physician, to compare, confirm and/or review a first diagnosis and/or a proposed treatment.

"Second opinion", widely used in American healthcare system since the 70's, has recently gained high importance all over the world.

In fact, in Germany, the establishment of certified organ site-specific cancer centers or second opinion centers by the German Cancer Society (GCS) represent successful models of cancer care (1).

The aim of this editorial/review is to highlight the rôle and benefits of "second opinion".

Introduction

"Second opinion" occurs in all fields of medicine, especially in oncology because of the life-threatening character of the disease.

In fact, oncology is a really complex discipline in which, daily, doctors and patients have to deal with new clinical, managerial, sociological and emotional 118 A. Wunsch, B. Palmieri

problems. Most patients are now better informedoften having gathered information from Web.

Often this searching behaviour becomes compulsive and excessive and leads to the "Web Babel Syndrome"; to face this problem the number of SO is increasing (2, 3).

SO seems to be particularly useful in some conditions, such as:

- rare types of cancer in which recent advances have taken place;
- when it is necessary that dedicated expert team face a selected problem;
- when a radical therapeutic option is being recommended;
- in case of conflicting opinions on the best management plan;
- when the patient cannot accept that nothing more can be done;
- in case of lack of communication between doctor and patient, lack of emotional support, or poor communication; these are important motives to seek additional consultation;
- when a new technique or a new drug is available for the patient's specific condition and its use is limited to specific health structures;
- when litigation is pending against the primary treatment centre.

It is also necessary to underline that a patient starts seeking a SO not only to find out new solutions or to reach a better quality of life, but also because the word "cancer" has an enormous emotional impact.

SO often represents an useful decision-support tool not only in order to achieve a re-evaluation of the patient's case with a consequent optimization of treatment and prognosis (4-8), but also to avoid unnecessary surgery and costs (9-13).

Several studies demonstrated the benefits of a second opinion.

In 1999, a study performed by Selman *et al.*, at the Ohio State University, assessed the critical rôle of the gynecologic-oncologic histopathology second opinion review which led to a change in diagnosis resulting in a proper therapeutic treatment and better prognosis implications (12).

Staradub et al., through the re-examination of pathology slides of patients with breast cancers,

underlined significant discrepancies in the diagnoses, leading to additional prognostic information in 40% of cases and confirming the benefit of a pathology second opinion to determine also the appropriate surgical approach (14).

Another recent study, confirmed a meaningful discrepancy between the original histopathological diagnosis and the second opinion in a cross-sectional study of 209 lesions received in consultation at the "Breast Pathology Laboratory of the School of Medicine" of the Federal University of Minas Gerais (15).

Another research group (10), showed the utility of SO through the re-evaluation of needle biopsies of 535 men referred for radical prostatectomy; among these biopsies, initially diagnosed as prostate adenocarcinoma, seven (1.3%) downstaged to benignity, with obvious implications on treatment.

Bajaj and colleagues, performed a study of 922 cases of thyroid Fine Needle Aspiration (FNA), cytology slides, referred to their institution over a 2-year period, to assess the magnitude of discrepancies and determine the clinical impact of second opinion; thirty-three cases underwent a change in treatment upon SO (7).

Also Park *et al.*, designed a study to determine the impact of secondary review of thyroid FNA biopsy on surgical management by assessing the frequency of discordant diagnoses.

FNA, in fact, which is a rapid and cost-effective test, recommended as primary diagnostic approach of thyroid nodules, is a worldwide approved screening test to distinguishing neoplastic from non-neoplastic nodules and to select proper surgical cases.

1499 patients were enrolled and diagnostic disagreement enclosed 394 cases (26.3%).

By the second opinion consultation, 65 (4.5%) patients were readdressed to the proper management (8).

Recently it has been demonstrated (16) the importance of a reinterpretation of imaging studies of head and neck cancer on 94 cases which led to more accurate staging of cancer resulting in a change of management plan in 38% of patients and in a better treatment decision-making.

Several previous studies had found significant discrepancy rates in diagnoses or staging re-evalua-

Rôle of SO in oncology: update

tion of these cancers subsequently modifying the surgical procedure and patients' care (17, 18, 20).

Zan et al., for example, found in 347/4534 cases relevant clinical different criteria from the first to the second diagnosis: most of them were discrepancies in detecting abnormalities rather than interpreting the identified findings. Second-opinion consultation was more accurate in 84% of cases (19).

Conclusions

In conclusion, it is important to underline the rôle of SO in healthcare and it is possible to conclude that SO will become increasingly important for high-quality patient care by improving the estimation of prognosis and determining the appropriate therapeutic yield.

It is also relevant to know something about expectations and patients' satisfaction on SO.

Investigating these aspects in groups of patients who get a neurological SO, it was found out that a day-care admission for neurological SO leads to an increase of patient satisfaction, irrespective of making a new diagnosis or initiation of a new treatment advice.

Interestingly, satisfaction was related to the amount of information and emotional support provided by the neurologist during the day-care admission (21-25, 27).

Another finding is that the psychological relevance of second opinions led to a short-term increase in patient satisfaction, but, after two years, satisfaction had decreased to the level seen prior to the second opinion; the benefit of second opinion consultations seems to be reasonable in the short term, but limited in the long term (28).

Conclusively, the second opinion in oncology is a common step for many patients requiring a deeper further revision of their clinical condition, an update of diagnosis and a possible therapeutic strategy in the hopeful perspective of a better prognosis. This further consultation has to meet not only the psychological support criteria of such delicate doctor-patient ethical relationship, but also a widespread knowledge of the safety and reliability of unconventional treatments

that very often are self administered without any expert medical advice.

Every step of cancer management, including palliative and terminal care, as well as the prolonged survival either with or without cancer, recruits cohorts of patients requiring a second opinion.

The hospitals and medical centers should therefore provide an adequate staff of specialists constantly interacting in such re-evaluation auditing, lead by an older supervisor in the rôle of "liason" among the team members (26).

The Web will be also a relevant partner in this procedure, because the patients consult it any time, very often, without any expert background and they will ask many questions to the doctors based on this information preview.

To avoid the "oncological Web Babel Syndrome" and to plan a rationale use of the financial resources, a well managed "second opinion medical office" will play a key rôle either for the patients and their family or society.

References

- 1. Gschwend JE, Albers P, Schrader M. Certified prostate cancer centers and second opinion centers for testicular cancer: successful models of uro-oncology cancer care. Urologe A 2011; 50 (8): 921-7.
- Cifaldi L, Felicetti V, Cristina G. The second opinion in oncology. Recenti Prog Med 2010; 101 (7-8): 299-302.
- 3. Palmieri B. The Web Babel Syndrome. Patient Educ Couns 2011 (letter).
- 4. Vashitz G, Davidovitch N, Pliskin JS. Second medical opinions. Arefuah 2011; 150 (2): 105-10, 207.
- 5. Palmieri B, Capone S, Fistetto G. Second opinion consultation: is Babel-web syndrome curable? Recenti Prog Med 2011; 102: 43.
- Al-Maghrabi JA, Sayadi HH. The importance of second opinion in surgical pathology referral material of lymphoma. Saudi Med J 2012; 33 (4): 399-405.
- Bajaj J, Morgenstern N, Sugrue C, et al. Clinical impact of second opinion in thyroid fine needle aspiration cytology (FNAC): a study of 922 interinstitutional consultations. Diagn Cytopathol 2012; 40 (5): 422-9.
- 8. Park JH, Kim HK, Kang SW, *et al.* Second opinion in thyroid fine-needle aspiration biopsy by the Bethesda system. Endocr J 2012; 59 (3): 205-12.
- 9. Ruchlin HS, Finkel ML, McCarthy EG. The efficacy of second-opinion consultation programs: a cost-benefit perspective. Med Care 1982; 20 (1): 3-20.

120 A. Wunsch, B. Palmieri

- Epstein JI, Walsh PC, Sanfilippo F. Clinical and cost impact of second-opinion pathology. Review of prostate biopsies prior to radical prostatectomy. Am J Surg Pathol 1996; 20 (7): 851-7.
- Di Cerbo A, Palmieri B. The economic impact of second opinion in pathology. Saudi Med J 2012; 33 (10): 1051-2 (editorial).
- 12. Selman AE, Niemann TH, Fowler JM, *et al.* Quality assurance of second opinion pathology in gynecologic oncology. Obstet Gyneco. 1999; 94 (2): 302-6.
- Timothy Craig Allen. Second Opinions Pathologists' Preventive Medicine. Arch Pathol Lab Med 2013; 137 (editorial).
- Staradub VL, Messenger KA, Hao N, et al. Changes in breast cancer therapy because of pathology second opinions. Ann Surg Oncol 2002; 9 (10): 982-7.
- 15. Perez AA, Balabram D, Salles MA, *et al.* Consultation in breast surgical pathology: interobserver diagnostic variability of atypical intraductal proliferative lesions. Rev Bras Ginecol Obstet 2013; 35 (4): 164-70.
- John T Lysack, et al. Impact of neuroradiologist second opinion on staging and management of head and neck cancer. J Otolaryngol - Head and Neck Surgery 2013, 42: 39
- 17. Loevner LA, *et al.* Reinterpretation of cross-sectional images in patients with head and neck cancer in the setting of a multidisciplinary cancer center. AJNR Am J Neuroradiol 2002; 23: 1622-6.
- Wheless SA, McKinney KA, Zanation AM. A prospective study of the clinical impact of a multidisciplinary head and neck tumor board. Otolaryngol Head Neck Surg 2010, 143: 650-4.
- Zan E, Yousem DM, Carone M, et al. Second-opinion consultations in neuroradiology. Radiology 2010; 255 (1): 135-41.
- 20. Viertel VG, Babiarz LS, Carone M, et al. Quality control in

- neuroradiology: impact of trainees on discrepancy rates. Am J Neuroradiol 2012; 33: 1032-6.
- 21. Mellink WA, Dulmen AM, Wiggers T, *et al.* Cancer patients seeking a second surgical opinion: results of a study on motives, needs, and expectations. J Clin Oncol 2003; 21 (8): 1492-7.
- Mellink WA, Henzen-Logmans SC, Bongaerts AH, et al.
 Discrepancy between second and first opinion in surgical oncological patients. Eur J Surg Oncol 2006; 32 (1): 108-12.
- 23. Philip J, Gold M, Schwarz M, *et al.* Second medical opinions: the views of oncology patients and their physicians. Support Care Cancer 2010; 18 (9): 1199-205.
- 24. Ong LM, Visser MR, Lammes FB, *et al.* Doctor-patient communication and cancer patients' quality of life and satisfaction. Patient Educ Couns 2000; 41: 145-56.
- 25. Wieske L, Wijers D, Richard E, *et al.* Second opinions and tertiary referrals in neurology: a prospective observational study. J Neurol 2008; 255: 1743-9.
- 26. Orgerie MB, Duchange N, Pélicier N, *et al.* Multidisciplinary meetings in oncology do not impact the physician-patient relationship. Presse Med 2012; 41 (3): 87-94.
- 27. Wijers D, Wieske L, Vergouwen MD, *et al.* Patient satisfaction in neurological second opinions and tertiary referrals. J Neurol 2010; 257 (11): 1869-74.
- 28. Wieske L, Vergouwen MD, Wijers D, *et al.* Limited benefit of diagnostic second opinions in a neurology department. Ned Tijdschr Geneeskd 2011; 155 (32): A3542.

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