Standardization of the Medical Record in Plastic Surgery

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ABSTRACT

The objective of the present study is to propose a standardization of the medical record for Plastic Surgery. The record model proposed would work for most plastic surgeons, and could be filled out in an automated and oriented manner by the physician and also allow adaptations according to individual needs. Data on Identification, Chief Complaints, History of Present Illness, Systems Investigation, Personal Background and Family Background could also be filled out alternatively by the patient him/herself, by using language and expressions accessible to the lay public, and in order to support the physician more effectively in the case of legal disputes. The record can be viewed quickly and objectively due to the use of figures and diagrams. It has a simple cataloguing and filing system for photographic documents and registered data are numbered in order, so that they may be computerized, making scientific research easier and minimizing data collecting errors. The record model may be used in hospitals, outpatient clinics and individual medical offices. The resolutions of the medical entities that regulate the utilization of Medical Records or Medical Files are also discussed.

Patient History in aesthetic Plastic Surgery differs from other medical specialties: in general, the patient already comes in with his/her own diagnosis and treatment. It is up to the specialist to confirm or not the "diagnostic hypothesis ", orient the best treatment, perform a clinical evaluation or contra-indicate surgery. Therefore, the psychological factors in these patients and in the physician-patient relationship are unique.

Another specificity of the specialty is that a result that may be considered satisfactory by the surgeon may not be so considered by the patient, or vice-versa.

The result of a surgery may also depend on factors that are not significant in other specialties. There are variables that may influence the quality of results, such as previous prolonged exposure to the sun, obesity, exaggerated and repeated changes in weight, post diet malnutrition in order to undergo plastic surgery, utilization of contraceptives, smoking, racial and age factors that interfere in scarring, and major psychological personality conditions, generally related to self-esteem and self-image.

Plastic Surgery, and more specifically aesthetic surgery, among the various medical specialties, is one that most frequently leaves the professional vulnerable to legal dispute. All these specificities of the specialty make it interesting to have a comprehensive and standardized "Medical Record" or "Medical Observation" that meets the needs of most plastic surgeons.

Integrating a medical record with standardized photographic documents benefits the plastic surgeon who could take better advantage of his routine work. The Medical Record for the Plastic Surgery patient is unique in the association of the Medical Record and photographic documents, therefore being called Clinical-Photographic Record or Photo-Document Set. "The medical record should comprise clearly the identification of the patient; daily medical follow-up (if inpatient); follow-up of nurses and other professionals; laboratory, radiological and other tests; medical reasoning, diagnostic assumptions and definite diagnosis; treatment, medical prescriptions, descriptions of surgeries, anesthetic records, discharge summary, outpatient appointments and/or urgencies, medical observation chart and physician follow-up."[1]

The Federal Medical Council enacted Resolution 1639 on July 10, 2002, approving the "Technical Standards for Using Computerized Systems for Keeping and Handling Medical Records "[2]. It established a minimum of 20 (twenty) years, as of the last recording, for keeping medical records in hard copies. Afterwards, the record may be stored in any magnetic or optical electronic medium and microfilmed, as long as it can be recovered, according to the standards of the Brazilian Society of Information Technology in Health (Sociedade Brasileira de Informática em Saúde - SBIS), in a specific association with the Federal Medical Council, and anticipated in the Brazilian Filing Legislation[2].

"The data that comprise the record belong to the patient and should be available on a permanent basis, so that whenever requested by the patient or proxy, they should allow for authentic copies of the pertinent information"[2] The Regional Medical Council stresses the rights of the patient: "To have access, at any time, to his/her medical record and receive in writing the diagnosis and treatment recommended, bearing identification with the name of the professional and registration number at the agency responsible for regulating and controlling the profession"[1]. Moreover, "The physician can not disclose the content of the medical record or file without the patient's consent, except for legal obligations. If the request is submitted by the family, the patient must give authorization "[1].

The quality of medical care depends on the quality of the information in the record [3]. A standard Clinical Chart should order the parts that refer to history, general and special physical exam and subsidiary tests. Registered data should be easy to see in a simple, fast and objective manner. The follow-up of the chart would assist scientific research, because of the possibility of computerization due to the numeric fields for registering data[4,5,6]. The record could be adapted for use in offices, outpatient clinics and hospitals. Using the record in a hospital with a busy surgery schedule would minimize the high possibility of errors whenever statistical studies are performed [7, 8].

The model for the standardized Medical Record herein proposed allows consistent utilization among plastic surgeons, responding to the needs of most professionals and is flexible enough to allow for individual adaptations. The fields were ordered aiming at following clinical reasoning and the distribution of space is adequate to the content of each item to be filled out. It allows a quick and global view of information due to the utilization of figures and diagrams, and also allows for an easy and oriented way of writing information (Figs. 1-6).

Fig. – Medical Record Model

MEDICAL RECORD

Nº ________ **- 1** (*Patient*)

IDENTIFICATION **Date:** ___ / ___ / ___

Name: ______________________ **Gender**: M F

Id no.: ______ **Taxpayer no.**: ______ **RACE**: White Mixed Black Yellow Other: ______

Birth Date: ___ / ___ / ___ **City:** ______ / ___ (State) **Country**: ______

Marital status: *Sin.* *Mar.* *Wid.* *Div.* *Other* **Profession**: ______ **Recommendation:** ______

Home address: ______________________

District: ______ **City**: ______ / ______ (State) **Postal Code**: ______

Phone: (___) ______ **No. Message**: (___) ______ messages w/: ______

Cell phone: (___) ______ **Fax**: (___) ______ **E-mail**: ______

Company: ______ **Company address**: ______

District: ______ **City**: ______ / ______ (State) **Postal Code**: ______ - ______

Phone (0xx__) ______ **Message w/**: ______ **Fax**: (___) ______

Health Plan: ______ **Policy no.:** ______ **Spouse / Person responsible**: ______

MEDICAL APPOINTMENT (Anamnesis)

REASON FOR APPOINTMENT (Chief Complaint and Length): ______

ONSET AND HISTORY OF CURRENT PROBLEM (History of Current Illness): ______

SYSTEMS REVIEW (S.R.) **(ORGANS) AND PERSONAL HISTORY** (P.H.)

Check with an **X** in the column **"Has"** if such disorder or illness exists in the present.
Describe in the column **"Has had"** if such illness has already occurred many times, and when it occurred last.
In case of any questions for filling out the table, consult with someone in the medical team.

1-DIGESTIVE SYSTEM	Has	Has had
1-mouth / teeth		
2-frequent heartburn		
3-gastritis / ulcer		
4- intestinal problem		
5-hemorrhoids		
6-constipation		
7- frequent diarrheas		
8-liver or gallbladder		
9-		

2-BONES & JOINTS	Has	Has had
1-bones		
2-backache (vertebral column		
3-osteoporosis		
4-recent fracture		
5-body joints (shoulder, knees etc)		
6-pains in joints in general		
7-jaw clicks when chewing (temporal mandibular joint)		
8- rheumatic condition		
9-		

Fig. 1 – Medical record (page 1).

3-LUNGS	Has	Has had
1-lack of air		
2-breath well through nose?		
3-cough frequently		
4-asthma / bronchitis		
5-pneumonias		
6-		

4-HEART, VESSELS, BLOOD PRESSURE	Has	Has had
1-low pressure		
2-high pressure		
3-palpitations (tachycardia)		
4-palpitations (cardiac arrhythmia)		
5-chest pain w/ effort (cardiac angina)		
6-heart attack		
7- heart murmur		
8-swollen legs		
9- leg varicose veins		
10-		

5- HORMONAL OR METABOLIC COND.	Has	Has had
1-diabetes		
2-thyroid		
3-cholesterol		
4-triglycerides		
5- uric acid		
6-		

6-BLOOD	Has	Has had
1- Anemia		
2-Bleedsexcessively when you cut yourself?		
3-Do you bleed easily?		
4-Received transfusion?		
5-		
6- Hemolytic anemia ( ) Yes ( ) No	7-Hemophilia ( ) Yes ( ) No	

7-INFECTION	Has	Has had
(Local) 1-		
2-		

8-SEXUAL ORGANS (Women)	Has	Has had
1-breasts (pain, lump, tumor, etc.)		
2-ovaries		
3-uterus		
4-changes in period		
5- pre-menstrual tension		
6-menopause problems		
7- hormone replacement		
8-		

9- 1-nº of children: ___ 2- normal delivery: ___ 3-Ceasrea:

10-date of last period: ___ / ___ / ___

11-método anticoncepcional: ______

12-Papanicolau test past 1 year? ___ No ___ Yes

9- SEXUAL ORGANS (Men)	Has	Has had
1-prostate (illnesses)		
2-		

10-NERVOUS SYST.	Has	Has had
1-insomnia		
2-anxiety		
3-depression		
4-migraine		
5-convulsion		
6-		

11-SEVERAL	Has	Has had
1-skin (lesions, spots, mycoses, tumors, etc.)		
2-cellulitis (buttocks, thighs, etc.)		
3-faintness or swoon		
4-congenital disease (born or genetic)		
5-cancer		local ______ time ______
6-		

12-HABITS	Has	Has had
1-smoking (tobacco)		time (in years): ______ cigarettes a day: ______
2-alcohol		time (in years): ______ type of beverage: ______
3-physical activity: 1-__ Mild 2-__W/ Effort 3-__ Sports		

Fig. 2 – Medical record (page 2).

13-KIDNEYS& BLADDER	Has	Has had
1-stones (lithonefria)		
2-problems to urinate (pain, ardor, blood, etc)		
3-urinary infections		
4-involuntary voiding (when coughing)		
5- strain to void(stream?)		
6-		

17- FAMILY HISTORY (FH)

1-Diabetes ______ relative: ______
2- Breast cancer ______ relative: ______
3-Other cancers local: ______ relative: ______
4-Blood conditions: ______ relative: ______
5-Other important conditions: ______ relative: ______
6

14-PSYCHOLOGICAL/PSYCHIATRIC QUESTIONNAIRE / (SRQ-20)	Yes	No
1- Do you have frequent headaches?		
2- Do you lack appetite?		
3- Do you sleep badly?		
4- Do you easily panic?		
5- Do your hands tremble?		
6- Do you feel nervous, tense, concerned?		
7- Do you have bad digestion?		
8- Do you have difficulty to think clearly?		
9- Have you felt sad lately?		
10- Have you cried more than usual?		
11- Have you had difficulties to satisfactorily fulfill daily activities?		
12- Do you have difficulties to make decisions?		
13- Do you have difficulties at work (work is costly, causes suffering?)		
14- Are you incapable of performing a useful role in life?		
15- Have you lost interest in things?		
16- Do you feel useless in life?		
17- Have you thought of putting an end to your life		
18- Do you feel tired all the time?		
19- Do you have unpleasant sensations in stomach?		
20- Do you get tired easily?		

18-COMPLEMENTARY QUESTIONING (**X** = Yes)

1-Do you wear contact lenses? ___
2- Do you wear dental prosthetics? _
3-Have you already received blood? ______
4- **ASA** in past 10 days? ___ (Acetyl Salicylic Acid, Alka Seltzer®, Buferin®, etc.)
5- Do you have allergies?
5.1 - ______
5.2 - ______
5.3 - ______

15-PREVIOUS GENERAL SURGERY (except plastic surgery)	Time? (months/years)	Operative complication?	type of anesthetics? Anesthetic complication?	Quality of scar excellent	Reasonable	Bad
1-						
2-						
3-						

16-PREVIOUS PLASTIC SURGERY	time? (months/years)	Operative complication?	type of anesthetics? Anesthetic complication?	Quality of scar excellent	Reasonable	Bad
1-						
2-						
3-						

19-MEDICATION IN USE

1- ______
2- ______
3- ______
4- ______
5- ______
6- ______

STATEMENT:

I, ______, Hereby declare to be true the information afore provided by me to fill out this questionnaire, and I am aware of the risks to my health and/or to research related to misinformation. Should there be any change in the symptoms herein informed or any change in medication, I shall inform my physician about it in my next appointment.

I also declare that I will authorize any possible use of pictures taken of any part of my body for the use in journals, books, congresses, or conferences, as long as for strictly scientific purposes.

______, ___ / ___ / ___ ______
city date signature of patient or person responsible

Fig. 3 – Medical record (page 3).

MEDICAL RECORD

Nº ________ **- 2** (*Physician*)

GENERAL PHYSICAL

BP = ___ x ___ Pulse = ______
Heart: ______
Lungs: ______
Abdomen: ______
Lower limbs: __edema__varicose veins__cellulitis
NOTE: ______

Weight = ______ . ___ Kg
Height= ______ cm
BMI(W/A²) = ______ (__)

< 18.5= excessively thin (1)
18.5 - 24.9= eutrophy (2)
25.0 - 29.9= overweight (3)
30.0 - 34.9= slight obesity (4)
35.0 - 39.9= moderate obesity (5)
> 40.0= morbid obesity (6)

RESULT QUESTIONNAIRE SRQ-20

(__) Yes (__) No
OBS.: ______

NOTES

SPECIAL PHYSICAL

SURGICAL PLANNING

Right profile Front Left profile

CERVICAL-FACIAL AND EYELID SURGERY

FACE: __ mini-lifting ___ temporal ___ rhytidoplasty ___ coronal
EYELIDS: ______ * ______ROOF ______SOOF
SKIN LESIONS: ______ (*Check on figure*)
BOTULINIC TOXIN: ______
PEELING: ______
OTHERS: ______

NOSE

___Conventional ______Exo-rhinoplasty ______Negroid
Apex: ______ Back: ______ Base: ______
Skin: ______ *NOTE*: ______

MASTOPLASTY (REDUCTION) Patient's desire: __ very small__ small__ medium
Larger breast: **R** - **L** * technique: ______ * **pedicle**: ______
MASTOPLASTY (AUGMENTATION)* Larger breast: **R** - **L** *Access route: ______
PROSTHETIC: brand______ surface______ shape______ profile ______ vol. ______
ABDOMINOPLASTY ___TOTAL ___MINI ___+LIPO Note: ______
OTHERS: ______

BODY CONTOUR (*check on figures*)

LIPOSCULPTURE: suction vol. (PO): ______ Lt.* Note.: ______
FAT INJECTION (*check on figure with different color*) ______
LIPECTOMY: ______
OTHERS: ______

Fig. 4 – Medical record (page 4).

As the item "Chief Complaints" is characteristically short and objective for most Plastic Surgery patients and because it was intended to optimize questions on the record, the items " History of Present Illness" (HPI) and "Family Background" (FB) were emphasized less, and "Systems Investigation" (SI) and " Personal Background" (PB)[9] were emphasized more.

Bearing in mind a still incipient anthroposophical approach in Plastic Surgery, but with a growing demand due to the needs the specialty requires, a psychiatric SRQ-20 (*Self Report Questionnaire)* questionnaire was included[10, 11]. It is a tool for assessing non-psychotic psycho-emotional disorders [12]. Eight or more positive affirmative answers in the assessment ("Yes") indicate that the patient has a significant depression and anxiety profile.

There is a tendency to automate care in centers with high patient loads. The Medical Record model described also allows it to be filled out by the patient in the waiting room for the fields referring to information the individual him/herself would give. In this case, the patient receives only the first part of the record ["Record N _- 1 (Patient)"], with a questionnaire written in terms and expressions he/she is able to understand.

The information and personal medical background should be dated and acknowledged by the patient with his/her signature on the Medical Record, bearing in mind that many patients, due to their anxiety to undergo plastic surgery, may deliberately or accidentally distort or hide important information. Having the fields filled out in the patients own handwriting presents the advantage of comprising in the future a tool for the physician in case of a lawsuit. Obviously, each item of the questionnaire needs to be checked by the physician, who should correct and take the notes he/she deems necessary in the open optional fields.

The Informed Consent can currently be considered as a part of the Medical Record or Medical File[13]. This is why a standardized Medical Record and Informed Consent are necessary in order to guarantee a healthy physician–patient relationship.

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UPPER LIMBS

Ventral dorsal

LOWER LIMBS

medial lateral

(Free option)

(Free option)

20- DIAGNOSIS(ES)	21- AMB Code	22- ICD
1-		
2-		
3-		

ESTIMATE:

SUBSIDIARY TESTS REQUESTED (check with X)

__ Blood count
__ Glucose level
__ Blood clotting
__ Urea
__ creatinine
__ sodium
__ potassium
__ cholesterol
__ triglyceride
__ uric acid
__ anti-HIV
__ protein profile
__ type I urine
__ urine culture
__ E.C.G.
__ mammography
__ chest x-ray
__ mandible panoramic

REQUEST FOR SPECIALIST (Referral)

1-
2-
3-

RESULTS OF TESTS REQUESTED

DATE: ___/___/___ *

OPINION IN REFERRAL APPOINTMENTS

1-
2-
3-

SURGERY: ____ DATE: ___ / ___ / ___ HOSPITAL /SERVICE ____

TEAM: ____ ANESTHESIOLOGIST: ____ ANESTHESIA: ____

LENGTH: ____ INTERCURRENCES: ____

A.P. TEST: ____ NOTE: ____

N° OF PICTURES *P = paper* *S = slide* *D = digital (file)* - check type(s) and take note of date in clinical follow-up *

PRE -	INTRA -	POSTOPERATIVE (n° months PO m : n° of pictures)
		___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___
		___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___
		___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___ - ___ m : n° ___

Fig. 5 – Medical record (page 5).

REMARKS:

DATE	FOLLOW-UP /DRESSINGS	*PICTURES

Fig. 6 – Medical record (page 6).

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