AN ANAESTHETIC RECORD

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ANAESTHETIC RECORDS are many things to different people. To the senior medical student and possibly to the interne they are examples of symbolization: for the clinical instructor and teacher they supply the essential threads of each anaesthetic story, and provide object lessons of pharmacological and physiological events occurring daily in practice; in clinical research they supply answers to questions of probability and possibility; and to our colleagues in other special fields they may be as incomprehensible as our universe. It is only in recent times that precise and accurate records have been considered necessary in anaesthesia, but now they may well point the way toward future anaesthetic horizons.

We may ask, what information should be on the anaesthetic record? What is significant and what is not? The anaesthetic record should show one of the most detailed events in the patient's clinical life. The story should be complete from the first preoperative visit to the last postanaesthetic visit.

To ensure the accuracy and detail required of such a record and to record by hand the minute to minute events, vital signs, and drugs given, it is necessary to resort to the use of abbreviations and symbols. The form of record presented here was evolved for daily use in a small hospital, and is planned to include the most accurate and detailed information with the least possible writing. It contains less detail than the I.B.M. or Keysort anaesthetic records, but still retains sufficient flexibility and detail to permit utilization in any hospital practice.

Consideration of this record may be conveniently divided into two sections: the first recording events from the preoperative visit to the termination of anaesthesia, and the second those from the arrival in the recovery room until the final post-anaesthetic visit. The first of these two parts is illustrated in Figure 1.

Each of the two major sections of the anaesthetic record may be considered as consisting of a number of parts, each useful for the recording of specific data. In Figure 2, the section placed at the head of the chart contains information of a general nature, including the blood group, pre and postoperative diagnosis, operation proposed and operation performed, and the names of the surgeons involved. Much of this information is entered while the chart is being initially assembled.

Figure 3 records the pre-anaesthetic evaluation, and has appropriate areas for recording information gleaned from the chart, and recent laboratory data of interest to the anaesthetist. Features included are the personal anaesthetic history of the patient, what maintenance medication the patient is taking (for example, cortisone), significant recent weight loss (often an indication of subliminal hypovolaemia), and whether the patient has or is suspected of having a full stomach. When the patient has been visited, the operative risk is judged and

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CMTOWN HOSP. HOSPITAL NO. _____ ROOM _____ DATE _____ IN PLACE _____ WEIGHT _____ BLOOD GROUP - A - B - AB - C. RH POS. NEG.

NAME _____ ADDRESS _____

DIAGNOSIS - PRE - _____ OPERATION - PROP. - _____

- POST - _____ - DONE - _____

SURGEON - _____ 1ST ASST - _____ ANESTHESIOLOGIST - DOUGLAS MACDONALD

WITHIN 48 HOURS
PREANESTHETIC EVALUATION - Y _____ P _____ N _____

ANESTHETIC HISTORY - _____

MAINTENANCE DRUGS - CONT. - BARBITURATE - _____
WT. LOSS _____

RESP. - ASTHMA - ACT. TBC - U. R. I. - _____

CIRC. _____

D. P. - _____ TYPE (INT. DIS.) _____

FUNCT. CAP. - 1 2 3 4 - DIGITALS - _____

FIBRILL - _____

CHEMISTRY - _____

HGB - _____ RBC - _____ WBC - _____ SEROLOGY - _____

NEURO. - _____

G. I. - FULL STOMACH - _____ OBSTR. - _____

G. U. - RETENT. - _____ NPN - _____ BLOOD - _____ WBC - _____
- SP. GR. - _____ ALD. - _____ SUGAR - _____

GYN. - HAEM. - _____

OB. - ABORT. - _____ TOX - _____
- DISPROP. - _____ AD. PRES. - _____

METABOLIC - DIABETIC - HYPERTHYROID - DEXTRO. ACID. ARTH. - _____

ALK. - _____

OTHER - _____

OPERATIVE RISK - ELEC 1 2 3 4. EMER. - 5 6 7 _____

PRE - MED. - DRUG - M OF A - DOSE (MGMS) - TIME _____

EFFECT OF - NOT DEPR - 100 DEPR. SATIS. APPREH. _____
WORK OFF - _____

INDUCTION - SMOOTH - DIFF. MILD MOD SEVERE _____
DESCRIBE - _____
MEMORY FOR - NIL - MILD - MOD - MAX M. LAR SP - CYAN. _____
COUGH - NAUS - VOM - EXCIT - SLOW - _____
METHOD - INHAL. IV - TOPIC - COND. - _____
AGENTS - _____

POSITION - LAT. - SUP. PRONE. FOWL. LITHOT. SIT. _____
TREND - PREV. - TREND - _____

ANESTHESIA METH. & TECH. - COND. - GENERAL - LOCAL - _____
CONB. - TOPICAL - _____ EPIDURAL - _____

NERVE OF F. BLOCK - _____

SUBDURAL - HYPER - HYPO - ISOBARIC - FLOW - P. F. G. CL - _____
I - O - _____ VOL - _____ TAP - E - D - 21 32 _____
LEVEL - _____ NEEDLE GA. - 22 - 24 - 26 - _____
DRUGS (MGMS) P - _____ G - _____ M - _____

GENERAL IV - IB - SC - RECTAL - INHALATION - _____

AGENTS - _____
- O. D. - S. O. - S. C. - C. CIRCLE - "T" TUBE - BAG & MASK - _____
RPM REDREA - VALVE - _____ HIGH FLOW - _____

INTUB. - EASY - DIFF. - _____

ENDS TR. TUBE NO. _____ NASAL - ORAL - VIS - BLIND - MAG. _____
CUFF - YES - NO - AWAKE - _____

MAINTENANCE - COMPLIC. - UNCOMPLIC. - _____

ANESTHETIC TIME - 20 - 40 - 60 - 80 - 100 - 120 - _____

TIME 0 15 30 45 60 75 90 105 120

A
G
E
N
T

O CC 300
X
Y LIT 2 3 4 5 6
F 5% DOW
L
U WB OR SUBT.
I
D

ANES. LIGHT
LEVEL
DEEP 200

TIME OF THERAPY

180
160
140
120
100
80
60
40
20
0

DRUG M OF A DOSE (MGMS) TIME EFFECT

REMARKS - _____

IMMEDIATE POST. ANES. COND. - AWAKE - ASLEEP - RESPOND - REFL. PRES. - DEPR. - AIRWAY GOOD - NEEDS SUPPLY

FLUIDS - GIVEN IN O. R. - _____
- NOT RUNNING - _____

SPONGE COUNT - CORRECT - _____ DRAINS OR PACKS - _____

SIGNATURE CHARGE NURSE _____
SIGNATURE OF ANESTHESIOLOGIST _____

FIGURE 1

CH TOWN HOSP. HOSPITAL NO. _____ ROOM _____ DATE _____ M F AGE _____ WEIGHT _____ BLOOD GROUP - A - B - AB - O. RH NEG. POS. _____
 NAME _____ ADDRESS _____
 DIAGNOSIS - PRE - _____ OPERATION - PROP. - _____
 . POST - _____ - DONE - _____
 SURGEON - _____ 1st ASST - _____ ANESTHESIOLOGIST - DOUGLAS MACDONALD

FIGURE 2

WITHIN 48 HOURS
 PREANESTHETIC EVALUATION - T _____ P _____ R _____
 ANESTHETIC HISTORY - _____
 MAINTENANCE DRUGS - CORT. - RAUWOLF - TRANQU - _____
 WT. LOSS _____
 RESP. - ASTHMA - ACT. TBC. - U. R. I. - _____
 CIRC. _____
 B. P. - _____ TYPE (HT. DIS.) _____
 FUNCT. CAP. - 1 2 3 4 - DIGITALS - _____
 FIBRILL. _____
 CHEMISTRY - _____
 HGB _____ RBC _____ WBC _____ SEROLOGY _____
 NEURO. - _____
 G. I. - FULL STOMACH - _____ OBSTR. - _____
 G. U. - RETENT. - _____ NPN _____ BLOOD _____ WBC _____
 - SP. GR. _____ ALB. - _____ SUGAR _____
 GYN. - HAEM. - _____
 OB. - ABORT. - _____ TOX. _____
 - DISPROP. _____ AD. PRES. - _____
 METABOLIC - DIABETIC - HYPERTHYROID - DEHYDR. ACID. ARTH. _____
 ALK. _____
 OTHER _____
 OPERATIVE RISK - ELEC 1 2 3 4. EMER. - 5 6 7. _____
 PRE-MED. - DRUG - M OF A - DOSE (MGMS) - TIME - _____
 EFFECT OF - NOT DEPR - TOO DEPR. SATIS. APPREH. - _____
 WORN OFF - _____

FIGURE 3

recorded, and premedication is ordered. It should be noted that here, and wherever practical in this record, the name of the drug, dose in mg., and method and time of administration are recorded. The effect of premedication will be judged and recorded in the pre-anaesthetic interval.

INDUCTION - SMOOTH - DIFF. MILD - MOD - SEVERE - _____
 DESCRIBE - _____
 MEMORY FOR - NIL - MILD - MOD - MAX M. LAR SP - CYAN. - _____
 COUGH - NAUS - VOM - EXCIT - SLOW - _____
 METHOD - INHAL - IV - TOPIC - COND - _____
 AGENTS - _____
 POSITION - LAT. - SUP - PRONE - FOWL - LITHOT - SIT. - _____
 TREND - PREV - TREND - _____
 ANESTHESIA METH. & TECH. - COND - GENERAL - LOCAL - _____
 COND. - TOPICAL - _____ EPIDURAL - _____
 NERVE OF F. BLOCK - _____
 SUBDURAL - HYPER - HYPO - ISOBARIC - FLOW - P. F. G. CL - _____
 I. S. _____ VOL. _____ TAP - E - D - 2x 3x _____
 LEVEL _____ NEEDLE GA. - 22 - 24 - 26 - _____
 DRUGS (MGMS) P. _____ G. _____ N. _____
 GENERAL - IV - IM - SC - RECTAL - INHALATION - _____
 AGENTS - _____
 . O. D. - S. O. - S. C. - C. CIRCLE - "T" TUBE - BAG & MASK - _____
 NON REBREA - VALVE - _____ HIGH FLOW - _____
 INTUB. - EASY - DIFF. - _____
 ENDO. TR. TUBE NO. _____ NASAL - ORAL - VIS - BLIND - MAG _____
 CUFF - YES - NO - AWAKE - _____
 MAINTENANCE - COMPLIC. - UNCOMPLIC. - _____

 ANESTHETIC TIME - 25 - 40 - 55 - 80 - 115 - 140. - _____

FIGURE 4

The actual anaesthetic experience is detailed in the section shown in Figure 4. The induction and its progression, the patient's memory for the experience in retrospect, and the method and agents used are described in detail. The position of the patient during induction and maintenance is recorded, and finally the anaesthetic method and technique are detailed. This particular part of the record is difficult to assemble and reduce to a reasonable size, and information in it was limited to local anaesthetic usage. There are three main divisions, with details supplied for conductive and general techniques. When the method is conductive anaesthesia, the appropriate type is encircled. If it is subdural, the baricity, type of flow, interspace, gauge of needle used, ease or difficulty of tap and number of insertions of the needle, and amount and volume of anaesthetic drug, glucose, and vasopressor are all described in detail.

If the method is general, then the mode of administration, agents used, and technique are detailed. Maintenance is described in general terms, specific complications are listed, and the anaesthetic time is expressed in economic terms. Anaesthetic agent, rate of oxygen flow, volume and type of fluid used, anaesthetic level, time of drug therapy, and vital signs are signified in the usual way in relation to time on the graph shown in Figure 5.

Figure 6 is a neat and accurate means of describing specific drug therapy during anaesthesia, and is related to the vital signs through the time of drug therapy in Figure 5. If necessary, this is continued into the section for "remarks." In this section of the chart, the immediate post-anaesthetic condition is recorded

TIME	0	15	30	45	60	75	90	105	120
A G E N T									
O CC 300									
X Y LIT 2 3 4 5 6									
F 5% D & W									
L WB OR SUBT.									
I									
D									
ANES. LIGHT									
LEVEL DEEP 200									
TIME OF THERAPY									
100									
100									
140									
120									
100									
80									
60									
40									
20									
0									

FIGURE 5

and fluids are accurately described in terms of the amount actually given in the operating room and the amount still running when the patient is discharged to the recovery room. Sponge count and the presence of drains or packs are also entered here, and the record is signed by the charge nurse and the anaesthetist.

The second part of the anaesthetic record deals with that period from arrival in the recovery room to the final post-anaesthetic visit. The events of this period are recorded in the form illustrated in Figure 7.

The vital sign chart which is typical for operating room use is available to the recovery room. Space is demarcated for the description of the airway, recording of the temperature, and the presence or absence of pain, restlessness, hypotension, nausea, or vomiting. The state of consciousness and time of awakening after arrival in the recovery room are also recorded.

[illegible]

FIGURE 6

The record also includes the description of drugs used with the usual pertinent data, and the total fluid intake and output from the time the patient left the surgical floor until his return. The time of arrival and discharge from the recovery room are entered, and space is provided for any remarks which the recovery room nurse may wish to make for the benefit of her associates on the surgical floor.

The post-anaesthetic course should also be recorded in detail, and this is accomplished by simple checking of the complication in relation to the proper postoperative day column. An adequate area is provided for recording remarks for greater detail.

In order to relate the morbidity recorded during anaesthesia and the post-anaesthetic course to the various methods and techniques, agents and regions, it is necessary to have this information in another area. In our hospital we find this most easily done in the regular operating room record book in a special anaesthetic section. Also recorded is the date, case number, name, age, operation, surgeon, assistant, preoperative and postoperative diagnosis, hospital number, address, responsible party, and information concerning the patient's insurance coverage such as group number.

Figure 8 illustrates the special section in which we record specific anaesthetic information under proper headings. The main subdivisions such as technique, agent, region, risk, complications, and for a pathology specimen are self-explanatory. Most of the subheadings are simply completed by a check mark and these are totalled at the bottom of the page, and carried forward monthly and yearly.

TIME 0 15 30 45 60 75 90 105 120
RECOVERY ROOM

ARTERY _____ PULSE _____

PAIN _____ RESPIRATION _____

SYSTOLIC _____ POSITION _____

MAPZA _____ RESPIRATIONS - IN - EX _____

CONSCIOUS _____ ATTENDED _____ DISTURBED _____

DATE _____ TIME H OF A DAY (2400) OFFSET _____

REMARKS _____

(1) ORAL _____ (2) IV _____ (3) BLOOD _____ TOTAL _____
 (1) URINE _____ (2) STOOL _____ (3) VOMITUS _____ (4) DRAINAGE _____ TOTAL _____
 TIME OF ARRIVAL IN RECOVERY ROOM _____ TIME OF DISCHARGE _____
 SIGNATURE _____

POST ANESTHETIC COURSE

SYMPTOM	POST. OP DAY							REMARKS
	1	2	3	4	5	6	7	
RESPIRATORY								
- CYANOSIS								
- FLECKING								
- CONVULSIONS								
- OTHERS								
CIRCULATION								
- DECOMPENSATION								
- THROMB. CIRCULI								
- OTHERS								
TEMPERATURE								
- LARYNGITIS								
- PNEUMONIA								
- OTHERS								
EMERGENCY								
- VOMITING								
- OTHERS								
EC-ANESTH. DIFFICULTY								
- OTHERS								
DISSEMINATED								
- OTHERS								
DATE OF DISCHARGE								
DATE OF ENTRY								

AUTOPSY YES NO
 SIGNATURE _____

FIGURE 7

RÉSUMÉ

L'auteur décrit une méthode de conserver, de façon précise et détaillée, tous les faits survenant au cours de l'anesthésie depuis la visite préopératoire jusqu'à la dernière visite postopératoire. Avec de semblables dossiers, l'auteur nous assure qu'il est possible d'étudier tous les détails de la morbidité pouvant se relier à l'anesthésie et il a la conviction qu'en adoptant cette méthode ou une semblable, les anesthésistes seraient capables de diminuer progressivement leurs pourcentages de morbidité.