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FURTHER OBSERVATIONS ON PERINEAL RUPTURE

IN 226 CASES

BY

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Pleased with what valuable information the measuring of the perineum in the course of the delivery of the head gives and conceiving the idea that all the three diameters that are involved in the process should be taken together into consideration, further observations were made on 226 cases, in addition to the previous 400, the report of the latter having already appeared in the Journal of Obstetrics and Gynaecology of India, Vol. III, No. 2, December 1952. This work has proved to be of great use in arriving at more precise inferences.

In order that the paper may be easily followed, it is necessary that some of the data, which have been described in the previous report, may now be in short referred to. The three diameters are P.A.P. (the an-

tero-posterior diameter of the perineum between the anus and the anterior edge of the perineum), V.V. (the vulvo-vertical between the anterior and posterior commissures). P.T. (the perineal transverse between the sides of the perineum when distended and taken at about its middle level). In the natural state these diameters are P.A.P. one inch and V.V. two inches. The third diameter P.T. becomes available for measuring when the perineum is so much distended by the advancing head that its sides can be distinctly felt and between them the diameter measured. These diameters increase in their lengths as the head is being born, P.A.P. becoming 2 inches, V.V. 4 inches and P.T. also 4 inches.

There are certain factors which at that time operate and lead to rupture of the perineum. They are, (1) some of the attendants who conduct cases may be wanting in skill in effecting delivery of the head as well as of the

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shoulders; (2) the patient herself may not co-operate with the attending midwife and may force out the head at the height of the pain just when it is crowned; (3) the tissues themselves may be unyielding as is usually found in a primigravida at an advanced age; (4) the genital tract itself may be poorly developed so that the vaginal orifice may be by nature small and inelastic. Under the circumstances tear of the tissues becomes inevitable.

The tear when spontaneous is usually irregular, ragged and therefore rather difficult to be stitched properly. On the other hand, if an artificial aid of the nature of what is called episiotomy is rendered in time, it becomes easier to repair the wound, and what is more the functions of the parts may be restored. So it is essential to know just when aid is to be offered. No means will suggest so assuredly that the time has approached to do so as the actual measurements of the parts can, they being by far the most reliable.

It is only when the head has-come down into the lower third of the vagina that it comes into relation with the perineum, for its posterior wall is in direct contact, with the upper surface of the perineum as the vagina curves forward to its orifice. When the propelling force of the uterus forces the head down, it is transmitted through the posterior wall of the vagina to the perineum, which is pushed down causing it to bulge and its middle point on the projected part to come to lie 4 inches (10 cm.) below the pubo-coccygeal level. The result of it is to open the vaginal ori-

fice and the anus. When the head is being born the vaginal orifice is 4" from before backwards. As the perineum is bulging, it becomes possible to measure the perineum from side to side, which on full distension measures also 4 inches. Among 226 cases under investigation, there were 137 cases of which the antero-posterior diameter of the vulval slit (V.V.) was 4 inches, and in 138 the perineal transverse (P.T.) was also 4 inches. P.A.P. increased to 2 inches in 134 cases.

As mentioned in the previous report, a form having various columns is used for recording the results of measurements.

These columns are as follows:-

1. Serial numbers. 2. Age of the patient. 3. Parity. 4. Weight of the child. 5. Tear or no tear. If torn, the extent. 6. Perineal antero-posterior measurement. 7. Vulval vertical and perineal transverse. 8. Head mea surements.

Column (1) is reference column.

Columns (2) of age and (3) of parity can be considered together. Among 226 cases the numbers of different paras are as follows.

in the second	Greatest: no.
Primiparas	63: 31
Second paras	56
Third "	43
Fourth "	16 me
Fifth "	20
Sixth "	
Seventh	4.4.
Eighth "	there 3 and
Ninth "	3
Tenth "	1
Alles enge	
	226

Column (4) is of weight of the child. The average weight worked out comes to 6.5 lb.

Column (5) represents tears. Out of 226, 40 suffered tear, which number includes 14 cases of spontaneous tear and 26 of episiotomy.

Column (6) gives measurements of the antero-posterior length of the perineum. It was found that the P.A.P. had increased to 2 inches in 134 cases, while above 2 inches up to 3 inches in 77, and under 2 inches up to $1\frac{1}{2}$ inches in 15 cases. So the greatest number was reached in those patients whose P.A.P. rose to 2 inches, it being 134, the percentage comes to 58.85. It is therefore right to hold 2 inches as the standard.

rements of the antero-posterior length of vulval slit named as vulvo-vertical (V.V.).

As the head is being born, the V.V. diameter was found to increase to 4 inches in 138. It rose to $4\frac{1}{4}$ inches in 13 and $4\frac{1}{2}$ inches in 3 cases, thus amounting to 16 only; while it remained under 4 inches in 72 cases of which $3\frac{3}{4}$ inches embodied 50. Taking together the cases above and below 4 inches, they show themselves to be only 88 as against 138, being of the length of 4 inches. It is therefore justifiable to recognise 4 inches as the standard length of V.V. diameter at delivery.

Perineal - Transverse diameter (P.T.):—

It is not uncommon to find that in majority of cases the two diameters, the V.V. and the P.T., are at the same time almost equal in length and go on increasing at the same rate.

Among these 226 cases, as individual length is taken into consideration, it is astonishing to notice that even P.T. was observed to have increased to 4 inches in 137 as against the V.V. diameter in 138. But a striking difference is to be made out when the two diameters have reached 33 inches. Then in case the vaginal orifice is by nature small and also inelastic the occipital part cannot easily advance further while the head during pain under the driving force of the uterus causes the perineum to bulge the more, thus giving 4 inches as its P.T. length, though the V.V. persists to be at 3\frac{3}{4} inches. That is the reason why there is difference in the number of cases in the category of (V. V. $3\frac{3}{4}$ – P.T. $3\frac{3}{4}$), they being 50 and 35 respectively. This however does not deter us from arriving at the conclusion that the standard length of should be regarded as 4 inches. Total number of cases above 4 inches is 35 and those under 54, thus amounting altogether to 89, which number too is less than that of 4 inches by 48.

As there is much interrelation between the vulval-vertical and the perineal-transverse diameters, the vulval slit opening almost to the same extent as does the perineum in bulging, the two diameters may be taken together into consideration and various groups formed in accordance with their respective lengths at head delivery. It has been already mentioned that both the diameters increase to 4 inches each in most cases, it is then justifiable to have 4''+4'' as the standard and to proceed with the process of comparison.

	Number of cases	Torn	Spon. Tear	Episiotomy	Not Torn
Standard Group (V.v. 4" P.T. 4")	116	6	6	_	110
Above Standard (lengths varying from 4" to 4\frac{1}{2}")	35	1	1	I WITTING	34
Below Standard (lengths varying from 3%" to 2½")	75	33	7	26	42
Total	226	40	14	26	186

Since P.A.P. 2" and V.V. and P.T. 4 inches each have been taken as the standard, and as all the three diameters are involved when the head is being born, 2" (4"—4") may be considered together, the P.A.P. being taken as the one component and V.V. and P.T.) as the second. At first P.A.P. may be supposed a constant factor while the second (V.V. and P.T.) factor is taken as a whole but at the same time ranging below the standard in order to find out what

number of cases have undergone tear in each group.

To appreciate the fate of all the remaining cases, which constitute a greater number, 123, we may first take those cases in which the first factor varies in length while the second factor is a constant.

In the following table P.A.P. is taken as the constant factor, while the second factor has its individual constituent rising variously above the standard.

					The state of the s	no un telfo	ton bour to
		A STATE OF THE STA	Number of cases	Torn	Spon. Tear	Episiotomy	Not Torn
Standard	Group 2"(4"-		82	2	2		80
	Group 2"(3\frac{1}{2}") Group 2"(3\frac{1}{2}")	—3¾″) —3¼″)	18 3	3 2		3 2	15 1
		Total	103	7	2	5	96
Mint 8	Varying P.A.P.	Constant (V.v.—P.T.)	Number of cases	Torp	Spon. Tear	Episiotomy	Not Torn
Group	2"	(4"-4")	82	2	2		80
Group	21"	(4"4")	24	1	1	-	23
Group	21"	(4"-4")	7	1	1		6
Group Group	2¾" 1¾"	(4''-4'') (4''-4'')	7 2 1	2	2		1
		Total	116	6	. 6	Alasa	110
	Constant P.A.P.	Varying (V.vP.T.)	Number	m	G	T	
M. TILL O	F.A.F.	(v.v1 .1.)	cases	Torn	Spon. Tear	Episiotomy	Not Torn
Group	2"	(4"-41")	6			_	6
Group	2"	(41"-41")	3	maya	-	_	3
Group	2"	$(4\frac{1}{4}''-4\frac{1}{2}'')$	1			_	1
		Total	10	_	-		10

In the following table P.A.P. 2" is regarded as the constant factor but the components of the second one vary in lengths. Groups are formed, first are those in which each constituent, though under 4", is taken as being equal in length, and then those which have the component unequal, though under the standard.

Groups with P.A.P. a constant factor while the second factor (V.V. and P.T.) has its constituents varying

from 4" to $3\frac{3}{4}$ ":

Remarks. When both V.V. and P.T. are under 4 inches but equal in length, i.e. $3\frac{3}{4}$ and $3\frac{3}{4}$, of the 18 cases, 3 had to be subjected to episiotomy. But when one of the constituents, either V.V. or P.T. had reached 4 inches, there might be no definite in-

dication for episiotomy. Yet it cannot be denied that out of 20 cases, three sustained tears, a number equal to that of episiotomies.

Groups with P.A.P. a constant factor while each of the second factor is definitely under the standard and varying from one another:

Remarks. Cases with V.V. and P.T., each under 3³/₄ inches, are few, being only 4. Three of them had episiotomies done on them.

The following groups are formed with P.A.P. $2\frac{1}{4}$ " while the components of the second factor are varying, either rising above or remaining under 4 inches.

(P.A.P.) $2\frac{1}{4}$ —(V.V. and P.T.) rising above the standard.

499491771	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear	Episiotomy	Not Torn
Group	2"	(33"-33")	77 18	. 3		3	15
Group	2"	$(3\frac{3}{4}''-4'')$. 17	2	2	MINITE AND	15
Group	2"	(4"-33")	9 3	1	1		2
Management distribution above		Total	38	6	3	3	32
	Constant	Varying	Number				
	P.A.P.	(V.vP.T.)	of cases	Torn	Spon. Tear	Episiotomy	Not term
Group	2"	$(3\frac{1}{2}''-3\frac{1}{2}'')$	3	2		2	1
Group	2"	$(3\frac{1}{2}^{"}-3\frac{3}{4}^{"})$	1	1	_	1	
		Total	4	3		3	1
	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear	Episiotomy	Not Torn
Group	21"	(4"-4\;\")	9		_	_	9 .
Group	2	$(4''-4\frac{1}{2}'')$	1	0-	_		1
Group	21"	(44"-44")	5	1	1	215	4
Group	21"	$(4\frac{1}{4}''-4\frac{1}{2}'')$	3	_	-	_	3
Group	21"	$(4^{1}_{2}^{"}-4^{1}_{2}^{"})$	1		-	m-maga	1
117		Total	19	1	1	_	18

Group

Group

apdra (Constant P.A.P.	(V.vP.T.) Varying	Number of cases	Torn	Spon. tear	Episiotomy	Not tern
Group	21"	(33"-33")	1	., 1		1	1 203
Group	. 21"	(33"-4")	4	4	. 3	1	i de la
Group	21"	$(3_2^{1}"-3_2^{1}")$	1	1	÷ : !!	1	N
Group	21"	(34"-32")	2 .	2	The call the case of	2	90-1
	-:	Total	8	8	3	5	

Remarks. In the above two tables there is a marked contrast, there being in the first, in addition to P.A.P. being 24 inches, the lengths measure above the standard in the V.V. and P.T. factor; and in the second table, they are under. In the first table there are 19 cases, of which only one is torn and that too slightly. In the second are included 8 cases of which only that group, which has the perineal transverse diameter risen to 4 inches, contains 3 cases of spontaneous tear and one of episiotomy; while the remaining three groups, embodying cases characterized by V.V. and P.T. diameters as under the standard contain 4 cases, equal to the

> $(3\frac{1}{2}^{"}-3\frac{1}{2}^{"})$ $(3\frac{1}{4}^{"}-3\frac{1}{2}^{"})$

Total

21"

former number. They had to be subjected to episiotomy.

P.A.P. $2\frac{1}{2}$ inches and V.V. and P.T. 4 inches and above. P.A.P. $2\frac{1}{2}$ inches and V.V. and P.T. mostly under 4 inches except one.

Remarks. With P.A.P. as $2\frac{1}{2}$ inches, V.V. and P.T. gave measurements above 4 inches in 6 cases; there was neither a spontaneous tear nor an episiotomy. But when the perineal measurements were under the standard, there were 5 cases all of which were torn, one having spontaneous tear while the rest, four in number, required episiotomy.

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	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear	Episiotomy	Not	Torn
		· · · · · · · · · · · · · · · · · · ·			* * * * * * * * * * * * * * * * * * * *			
Group	21//	(4"-44")	3	_	_	_		3
Group	21"	(44"-44")	1.		_	-		1
Group	21"	$(4\frac{1}{2}''-4\frac{1}{2}'')$	2	_				2
		Total	6	-				6
	Constant	Varying	Number	-1				
THE LOW		(V.vP.T.)	of	Torn	Spon. Tear	Frisiotomy	Mat	Town
	F.A.F.	(V.VF.1.)	cases	iom	Spon. Tear	Episiotomy	1906	TOTH
Group	21"	(33"-33")	3	3	1 .	2		
Group	21"	(33"-4")	_		_	-		-

1

1

Table with P.A.P. 23 inches. No case was there with V.V. and P.T. rising above 4 inches; but all the 4 cases under the standard.

Remarks. There were only four cases. They were all with perineal measurements under 4 inches. They had to be subjected to episiotomy.

Table with P.A.P. 3 inches. These cases were only two. V.V. and P.T. under the usual.

Remarks. In these cases the perineum was greatly stretched anteroposteriorly but the vulval opening remained smaller. Episiotomy was inevitable.

Table with P.A.P. under 2 inches and also V.V. and P.T. under the standard.

There was only one case in which P.A.P. was $1\frac{3}{4}$, while (V.v.-P.T.) was 4"-4" (constant). This case is described before.

					miscernia de la compania del compania del compania de la compania del la compania de la compania della compania
W V	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear Episiotomy Not Torn
Group Group	2¾" 2¾" 2¾"	$(3\frac{3}{4}''-3\frac{3}{4}'')$ $(3\frac{1}{4}''-3\frac{1}{2}'')$ $(3\frac{1}{2}''-3\frac{3}{4}'')$	2 1 1	2 1 1	2 - 2 1 1 1
		Total	4	- 4	<u> </u>
	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear Episiotomy Not Torn
Group Group	3′′ 3′′	(3½"-3½") (3"-3")	1 1	1 1	or Indiana
· and a	Ma III Te	Total	2	. 2	<u> </u>
	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear Episiotomy Not Torn
Group Group Group	1¾" 1¾" 1¾"	(3½"-3½") (3½"-3½") (3½"-3½")	5 2 2		
		Total	9	by a most	9
	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear Episiotomy Not Torn
Group Group	13" 13"	$(2\frac{3}{4}''-2\frac{3}{4}'')$ $(2\frac{1}{2}''-2\frac{1}{2}'')$	1 2	1 2 .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Office II.	Tipe in	Total	3	3	of the state 3 in the belief

	Constant P.A.P.	Varying (V.vP.T.)	Number of cases	Torn	Spon. Tear	Episiotomy	Not Torn
Group	1½"	(2¾"—2¾")	1	1		1 (Symphy-siotomy)	
Group	11/2"	(24"-21")	1	1	non de su	1 (Forceps & Episio- tomy)	
		Total	2	2	Ground .	2	-1:-
Septimental of the september of the sept	10000	Number of cases	Torn	Spon. Tear	Epis	iotomy	Not torn
Gross total.		226	40	14		26	186

Remarks. The cases which had P.A.P. under 2 inches, were 15 in all. Peculiarities of this class of case are the following:

I. Very few cases, only 15 out of

226, 6.63%.

II. P.A.P., V.V. and P.T. diameters remained under the standard, with the exception of one case in which V.V. and P.T. rose to 4 inches each. This patient was a second para, 21 years old, child 63 lb. No tear.

III. Of the remaining 14 cases, P.A.P. rose to $1\frac{3}{4}$ inches in 12 and to

1½ inches in 2 cases.

IV. In 9 cases out of 12 with P.A.P. 13 inches, V.V. and P.T. were above 3 inches, ranging between 31/4 inches to 3\frac{3}{4} inches. In these cases delivery was normal without tear, which can be accounted for by small size and weight of the children and the perineal tissues extensile.

V. In the remaining 5 cases, 3 with P.A.P. 13 inches and 2 with 12 inches, but at the same time V.V. and P.T. did not rise above $2\frac{1}{2}$ or $2\frac{3}{4}$ ". In all these cases, artificial aid in the shape of episiotomy with forceps application had to be rendered. In one

case with P.A.P. 1½ inches, V.V. 2¾ inches and P.T. 23 inches, symphysiotomy had to be done because of outlet contraction. It was also associated with toxaemia and inertia.

VI. Other reasons for the lengths to persist under the standard are:

(a) Genital tract hypo-plastic. In almost all the cases which were admitted at the very onset of labour, P.A.P. measured $\frac{1}{2}$ " to $\frac{3}{4}$ ", the standard length being 1 inch in the nonpregnant state.

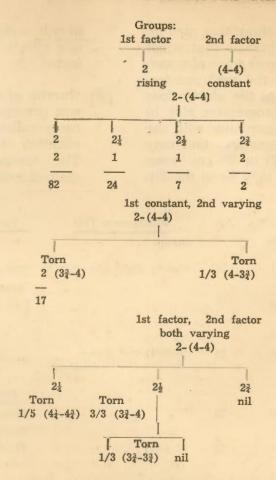
(b) Smallness of foetuses. Out of 15 cases, in 13 the weight was under the average (6.53 lbs.), ranging between 3½ and 6 lbs. Small children have small heads, which become yet smaller by moulding during their descent through the hypoplastic narrow birth canal.

(c) Toxaemia of pregnancy. Seven patients suffered from it. One of them had a stillborn child, weighing 31 lbs., two premature children, with $4\frac{3}{4}$ lbs. as weight of each. All other children weighed $5\frac{3}{4}$ lbs. and under. One thing that may be mentioned here is that when a patient shows signs of toxaemia early in the last trimester, the fundus of the uterus does not show progressive rise in height in accordance with the age of pregnancy and may persist at 25 or 26 cm. even though she may be in the 8th

month, indicating that toxaemia affects the growth of the foetus.

(d) Inertia of the uterus. Inertia was present in all the five cases calling for forceps application to effect delivery. The measurements had remained small as shown in V.

Reg. No.	Para	Baby Wt.	Age	Sponta	neous	Tear	Tear	rs	
		lbs.		Group					
92	I	71/2	24	(2-4-4) sli	ight (1st degree)	Slight		 5
							Moder	ate	 8
169	II	63	25	99	>>		Extens	sive	 1
22	I	63	23	(2-33-4) 2	nd de	egree			14
				(, -) -		(moderate)			
							Para	as	
133	II	63	23	99	,,		Primi	-	 7
				"	"		Secon		 4
12	I	7	22	$(2-4-3\frac{3}{4})$	99		Third	,,	 3
								1	
207	I	6	24	$(2\frac{1}{4}-4-4)$	29	slight			14
							Age	Periods	
165	I	8	20	$(2\frac{1}{4}-4\frac{1}{4}-4\frac{1}{4})$	2nd	degree	20-25		 10
132	III	63	25	$(2\frac{1}{4} - 3\frac{3}{4} - 4)$			26-30		4
189	I	63	21	99	"				14
							Bab	y wt.	
208	II	6	30	33	"		6 -61/2	lbs.	 3
224	I	63	25	$(2\frac{1}{2}-4-4)$	22		$6\frac{3}{4} - 7$	"	 7
191	II	64	28	$(2\frac{1}{2} - 3\frac{3}{4} - 3\frac{3}{4})$	" e:	xtensive	71-71	**	 1
16	III	8	26	$(2\frac{3}{4}-4-4)$	99	slight	73	,,	 1
149	III	7%	28	99	99	moderate	8	"	 2
			400						14



It may be conceded that most of these cases could have been submitted to the operation and irregular and ragged tear avoided. Second paras had spontaneous tears in the first delivery and so also had the third paras. The union being weak they tore readily. Again, two of them had plastic operations done before.

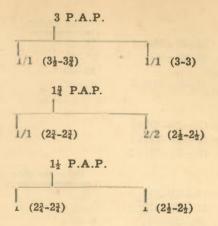
On referring to the above, it may

be noticed that when the anteroposterior length of the perineum rises above 2 inches and at the same time the antero-posterior length of the vulval slit and the perineal transverse remain $3\frac{3}{4}$ inches or under, there is greater probability of the rupture. It is more so in the case of vaginal orifice, if small and inelastic.

Episiotomies

Reg. No.	Age	Para	Baby V	Vt. Group	Paras	No.
17	21	1	71/4	$(2-3\frac{3}{4}-3\frac{3}{4})$	Primiparas	 21
135	30	I	63	$(2-3\frac{3}{4}-3\frac{3}{3})$	Second paras	 4
138	25	1	5	$(2-3\frac{3}{4}-3\frac{3}{3})3/18$	Third paras	 1
			1	,		
						20

						Age pe	eriods		
	196	24	I	6	$(2-3\frac{1}{2}-3\frac{3}{4})1$	/1 16—20		8	
	63	29	Ī	7	$(2-3\frac{1}{2}-3\frac{1}{2})$	21—25		11	
						26-30		5	
	214	27	I	53	$(2-3\frac{1}{2}-3\frac{1}{2})2$	/3 31—35		2	
								_	
								26	
	6	23	I	7	$(2\frac{1}{4} - 3\frac{3}{4} - 4)1/$				
	187 57	24 18	I	6¼ 7	$(2\frac{1}{4} - 3\frac{3}{4} - 3\frac{3}{4})$ $(2\frac{1}{4} - 3\frac{1}{2} - 3\frac{1}{2})$				
	31	10	1	*	(24-32-32)	1/1			
						Baby	weights		
48/6	117	18	I	63	$(2\frac{1}{4} - 3\frac{1}{4} - 3\frac{1}{2})$	lbs.			
4	119	30	I	5	$(2\frac{1}{4} - 3\frac{1}{4} - 3\frac{1}{2})^2$	2/2 5—53		5	
	49	21	I	74	$(2\frac{1}{2}-3\frac{3}{4}-3\frac{3}{4})$	6—63		12	
	202	25	II	74	$(2\frac{1}{2} - 3\frac{3}{4} - 3\frac{3}{4})$	2/3 7—73		9	
								_	
								26	
						Forceps	and Episiotomy		
	11	22	I	71/2	$(2\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2})$	1/1 5 one of	them had symphisic	tomy, force	ps
	15	25	I	63	$(2\frac{1}{2}-3\frac{1}{4}-3\frac{1}{2})1$		isiotomy.		
	174	19	I	63	$(2\frac{3}{4} - 3\frac{3}{4} - 3\frac{3}{4})$		2(P.A.P.)		
	217	20	II	63	$(2\frac{3}{4} - 3\frac{3}{4} - 3\frac{3}{4})$	2/2			
	166	20	I	63	$(2\frac{3}{4} - 3\frac{1}{2} - 3\frac{3}{4})$				
	77	20	II		$(2\frac{3}{4} - 3\frac{1}{4} - 3\frac{1}{2})$	$1/1$ $3/18(3\frac{3}{4}-$	$-3\frac{3}{4}) \qquad 1/1(3\frac{1}{2}-3\frac{3}{4})$	$2/3(3\frac{1}{2}-3)$	1/2)
R	eg. No.		Age	Para	Baby Wt.	Group			
100	. I.O.		1180	2 414	lb.	aroup			
	87		30	II	6	$(3-3\frac{1}{2}-3\frac{1}{2})$ 1	1		
	98		23	III	53	(3-3-3) 1/1			
	109		21	I	$6\frac{1}{2}$	$(1\frac{3}{4}-2\frac{3}{4}-2\frac{3}{4})$ 1			
	101		33	I	6	$(1\frac{3}{4}-2\frac{1}{2}-2\frac{1}{2})$ 1			
	120		20	I	53	(11 02 02) 1	2/2 forceps		
	32 ,		32	I	6	(1½-2½-2½) 1	/1 symphisiotomy, episiotomy	forceps and	
	153		19	I	7	$(1\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2})$ 1			
	100		10	l local man	Short - The	(12-22-22)	., т тогосры.		
						2½ P.A.	P.		
2									
		-		1			M 21130		
	4 (33-4)			3½-3½	;)	$1/2 \ (3\frac{1}{2} - 3\frac{1}{2})$	2/2 (31-31)	
						2½ P.A	.P.		
				0/0 /01	023	(01 01)	(0) 01		
				2/3 (33-	34)	$1/1 \ (3\frac{1}{2} - 3\frac{1}{2})$	$1/1 (3\frac{1}{4} - 3\frac{1}{2})$)	
						23 P.A.	D		
						Zį F.A.			
				1					
				2/2 (33-	33)	1/1 (31-34)	1/1 (31-31)	1	



Summary

(1) In majority of cases, in non-pregnant state as well as at the onset of labour, as a patient is admitted to the hospital with pains, P.A.P. (perin-ant-post) and V.V. (vulval vertical) diameters are found to be 1 inch and 2 inches respectively.

(2) Towards the end of the second stage, as the head is passing over the perineum, stretching the perineum from behind forwards, opening the anus and bulging perineum, and dilating the vaginal orifice, these diameters go on increasing so that as the head is being delivered, in most of the cases P.A.P. increases to 2 inches, V.V. 4 inches and P.T. 4 inches.

(3) Should P.A.P. tend to increase above 2 inches and V.V. and P.T. remain persistently under 4 inches, spontaneous tear is most likely to occur.

(4) Realising this, to prevent spontaneous tear, which is ordinarily wide, ragged and not easy to stitch up properly, episiotomy is suggested.

(5) In addition to the diameters calling for episiotomy, if blood begins to escape or the anterior part of the

perineum is found to become very thin, episiotomy becomes imperative.

(6) In case P.A.P. is seen to increase only by half or three-fourth of an inch becoming 1½ or 1¾ inches, while the vaginal orifice does not dilate more than 2½ inches, and the anus at the same time appears not to open more than quarter of its full dilatation during the pain, and if the uterine contractions are gradually getting feebler and more infrequent, forceps with episiotomy is indicated.

Subsequent to the above report, as the observations were being carried on, two cases of unreduced occipitoposterior position were encountered. It was observed in them that though vulvo-vertical diameter was found to increase by a quarter of an inch or slightly more during pains, perineal diameters did not show any increase. In both cases forceps had to be applied combined with episiotomy. The child was extracted with face to the front. It can be explained in this way that the sinciput could descend through pubo-cervical aperture, it being narrow, while the wider occipital part could not make any advance.

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Measurements

Reg. No.	Age	Para	Weight of	Tear	Perineum Antero- Posterior (Inches)	Vulval- Vertical (Inches)	Perineal- Transverse (Inches)	Remarks
1	18	I	51/2	Nil	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
2	35	V	6	99	$1 - 2\frac{1}{4}$	2 - 4	2 - 4	
3	26	II	6	33	14 - 2	2 - 4	$2 - 3\frac{3}{4}$	
4	24	II	74	,,	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
- 5	26	II	7	>>	$1\frac{1}{2} - 2$	$2\frac{1}{2} - 3\frac{3}{4}$	2 - 4	
6	23	I	7	Epis.	$1\frac{1}{4} - 2\frac{1}{4}$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
7	18	I	63	Nil	1 - 2	21 - 4	2 - 4	
8	32	VI	7	>>	1 - 2	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
9	27	v	7	27	1 - 2	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4\frac{1}{4}$	
10	32	III	71	**	$1\frac{1}{4} - 2$	$2\frac{1}{4} - 4$	2 - 4	
11	22	I	71/2	Epis.	$1\frac{1}{4} - 2\frac{1}{2}$	$2 - 3\frac{1}{2}$	2 - 31	
12	22	I	7	Sp. tear	1 - 2	2 - 4	$2 - 3\frac{3}{4}$	
13	19	I	61/2	Nil	$1\frac{1}{4} - 2$	$2\frac{1}{4} - 4$	2 - 4	
14	20	II	63	"	1 - 2	2 - 4	2 - 4	
15	25	I	63	Epis.	$1\frac{1}{4} - 2\frac{1}{2}$	$1\frac{3}{4} - 3\frac{1}{4}$	$1\frac{3}{4} - 3\frac{1}{2}$	
16	26	III	8	Sp. tear	$1\frac{1}{2} - 2\frac{3}{4}$	2 - 4	2 - 4	
17	21	I	71	Epis.	1 - 2	$1\frac{3}{4} - 3\frac{3}{4}$	$1\frac{3}{4} - 3\frac{3}{4}$	
18	20	I	6	Nil	$1 - 1\frac{3}{4}$	$2 - 3\frac{3}{4}$	2 - 4	
19	30	III	7½	**	$1\frac{1}{2} - 2\frac{1}{2}$	$2\frac{1}{4} - 4$	2 - 4	
20	24	II	8	"	1 - 2	2 - 4	$2 - 4\frac{1}{4}$	
			(Premat.)	,,				
21	26	II	43	99	$\frac{3}{4} - 1\frac{3}{4}$	$2 - 3\frac{1}{2}$	2 - 31	
22	23	I	63	Sp. tear	1 - 2	$2 - 3\frac{3}{4}$	2 - 4	
23	30	III	74	Nil	$1\frac{1}{2} - 2\frac{1}{4}$	2 - 4	$2 - 4\frac{1}{4}$	
24	25	II	71	,,,	14 - 24	2 - 4	2 - 4	
25	20	II	73)9)9	14 - 2	$2 - 4\frac{1}{4}$	2 - 41	
26	27	Ĩ	53	>9 >9	1 - 13	$1\frac{3}{4} - 3\frac{3}{4}$	13 - 4	
27	29	VI	8))))	11 - 21	$2\frac{1}{2} - 4\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	
28	18	II	71/4		11 - 2	21 - 4	$\frac{21}{24} - \frac{41}{4}$	
29	26	v	73	19	$1\frac{1}{2} - 2\frac{1}{2}$	21 - 4	21 - 41	

Measurements

Reg. No.	Age	Para	Weight of	Tear	Perineum Antero- Posterior (Inches)	Vulval- Vertical (Inches)	Perineal- Transverse (Inches)	Remarks
30	25	III	73	**	$1\frac{1}{4} - 2\frac{1}{4}$	2 - 4	2 - 41	
31	28	III	71/2	"	1 - 21	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
32	32	I	6	Symph	$1 - 1\frac{1}{2}$	$1\frac{3}{4} - 2\frac{3}{4}$	$2 - 2\frac{3}{4}$	
33	41	VI	63	Nil	$1\frac{1}{2} - 2\frac{1}{2}$	$2\frac{1}{4} - 4$	2 - 4	
34	23	I	6	"	1 - 2	$2 - 3\frac{3}{4}$	2 - 4	
35	25	I	8	19	$1\frac{1}{4} - 2$	$2\frac{1}{4} - 4\frac{1}{4}$	$2\frac{1}{4} - 4\frac{1}{4}$	
36	30	VI	61	>>	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	2 - 4	-65-0
37	23	V	$6\frac{1}{2}$	22	$1\frac{1}{4} - 2\frac{1}{2}$	$2\frac{1}{2} - 4$	2 - 4	
38	22	II	63	**	1 - 2	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
39	26	V	71	99	$1 - 2\frac{1}{4}$	2 - 4	2 - 4	
40	30	VI	71	99	1 - 2	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
41	22	II	7	"	1 - 2	2 - 4	2 - 4	
42	28	IV	8	"	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	
43	29	III	71/4	"	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
44	25	I	6	"	1 - 2	2 - 4	2 - 4	
45	30	III	7	,,	$1 - 2\frac{1}{4}$	2 - 4	2 - 4	
46	26	1	6	>>	1 - 2	2 - 4	2 - 4	
47	20	II	7½	"	$1 - 2\frac{1}{4}$	2 - 4	$2 - 4\frac{1}{4}$	
48	24	II	64	99	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	2 - 4	
49	21	I	74	Epis.	$1 - 2\frac{1}{2}$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
50	23	II	5 3	Nil	1 - 2	2 - 3%	2 - 4	
51	27	II	6	77	1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	100
52	28	III	7	99	1 - 2	2 - 4	2 - 4	
53	29	VI	8	**	$1\frac{1}{2} - 2\frac{1}{4}$	2 - 4	$2 - 4\frac{1}{4}$	
54	30	VIII	73	99	14 - 24	$2\frac{1}{4} - 4\frac{1}{4}$	$2\frac{1}{4} - 4\frac{1}{4}$	
55	22	IV	6	99	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	$2\frac{1}{4} - 4$	
56	25	IV	41/4	39	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
57	18	I	7	Epis.	$1 - 2\frac{1}{4}$	$2 - 3\frac{1}{2}$	$2 - 3\frac{1}{2}$	
58	25	III	6	Nil	2 - 2	2 - 4	2 - 4	
59	24	II	53	99	$1\frac{1}{4} - 2$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
60	30	V	81	,,,	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{2} - 4\frac{3}{4}$	$2\frac{1}{2} - 4\frac{1}{2}$	
61	30	VI	74	33	$1\frac{1}{4} - 2$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
62	18	I	53	99	1 - 2	$2 - 3\frac{3}{4}$	2 - 34	
63	29	I	7	Epis.	1 - 2	$1\frac{3}{4} - 3\frac{4}{2}$	$1\frac{3}{4} - 3\frac{1}{2}$	
64	31	VI	54	Nil	1 - 2	$2 - 3\frac{3}{4}$	2 - 33	Uil
65	29	VI	63	29	1 - 2	2 - 4	2 - 4	
66	32	III	71	"	1 - 2	2 - 4	2 - 4	
67	33	VII	8	99	1 - 2	2 - 4\\ 21 23	$\frac{2}{2} - \frac{41}{2}$	
68	24	III	6	>>	$1\frac{1}{2} - 2$	$2\frac{1}{4} - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
69	36	VI	9	29	$1\frac{1}{2} - 2\frac{1}{2}$	$2\frac{1}{2} - 4\frac{1}{2}$	$\frac{2}{2} - \frac{41}{2}$	
70	23	III	$6\frac{1}{2}$	"	$1\frac{1}{4} - 2$	2 - 4	2 - 4	3
71	21	I	6	79	3 - 2	$1\frac{3}{4} - 3\frac{3}{4}$	$1\frac{3}{4} - 3\frac{3}{4}$	
72	22	II	63	99.	1 - 2	2 - 4	2 - 4	
73	30	III	73	99	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
74	29	V	61/2	19	1 - 2	2 - 4	2 - 4 2 - 4	
75	25	I	6	"	$1\frac{1}{4} - 2$	2 - 4 2 - 4	$ \begin{array}{r} 2 - 4 \\ 2 - 4 \\ \end{array} $	Unit
76	21	II	73	99	1 - 2	2 - 4	2 - 44	

				Measurement	S			
Reg. No.	Age	Para	Weight of	Tear	Perineum Antero- Posterior (Inches)	Vulval- Vertical (Inches)	Perineal- Transverse (Inches)	Remarks
77	20	II	7	Epis.	$1 - 2\frac{3}{4}$	2 - 31	2 - 31	
78	28	IX	73	Nil	$1\frac{1}{2} - 2\frac{1}{2}$	21 - 41	$2\frac{1}{2} - 4\frac{1}{4}$	
79	32	V	6	**	1 - 2	2 - 4	2 - 4	
80	27	III	6	',,	11 - 21	$2\frac{1}{2} - 4$	24 - 4	
81	32	V	6	"	$1 - 2\frac{1}{2}$	2 - 4	2 - 4	
82	27	III	6	?? ??	$\frac{1}{1} - \frac{2}{1}$	21 - 4	21 - 4	
83	20	I	53	99	$\frac{3}{4} - 2$	$1\frac{3}{4} - 3\frac{3}{4}$	13 - 4	
84	29	II	. 6	27	11 - 2	2 - 4	2 - 4	
85	32	V	64	22	1 - 2	2 - 4	2 - 4	
86	35	VIII	73	33	14 - 24	21 - 4	21 - 4	
87	30	II	6	Epis.	14 - 3	2 - 35	$2 - 3\frac{1}{2}$	
88	31	II	63	Nil	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
89	22	I	$5\frac{3}{4}$,,	1 - 2	2 - 33	$2 - 3\frac{3}{1}$	
90	22	Î	$5\frac{3}{4}$	"	11 - 2	$\frac{2}{2} - \frac{34}{34}$	2 - 34	
91	30	I	54	27	1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
92	24	I	$7\frac{1}{2}$	Sp. tear	1 - 2	2 - 4	2 - 4	
93	21	II	63	Nil	3 - 13	13 - 4	13 - 4	
94	35	III	$3\frac{1}{2}$	St. Bir. Nil		$\frac{14}{2} - \frac{1}{34}$	2 - 31	Still-birth
95	22	III	63	Nil	1 - 2	$\frac{2}{2} - \frac{34}{4}$	2 - 4	Still-bil til
	30	V	8		$1\frac{1}{1} - 2\frac{1}{2}$	2 - 4	$2 - 4\frac{1}{4}$	
96			6	,, Nil	$\frac{14}{1} - \frac{22}{2}$	$\frac{2}{2\frac{1}{4}} - \frac{3}{3}$	$\frac{2}{2} - \frac{44}{4}$	
97	23	II		Epis.	$\frac{1}{1} - 2$	$\frac{24}{3} - 34$	$\frac{2}{1\frac{3}{4}} - \frac{4}{3}$	
98	23		5 3	Nil	$\frac{1}{2} - 3$ $1 - 2$	$\frac{14}{2} - 3$	$\frac{14 - 3}{2 - 3\frac{3}{4}}$	
99	21	III	5 3		$\frac{1}{1\frac{1}{4}} - \frac{2}{4}$	$\frac{2}{2\frac{1}{4}} - 4$	$\frac{2}{2} - \frac{34}{4}$	
100	29	II	74	", Former	14 - 24	24 - 4	4 - 44	
404	00		6	Forceps,	1 - 13	$1\frac{3}{4} - 2\frac{1}{2}$	2½	
101	33	I		Epis.	1 - 14 $1 - 2$	$\frac{14}{2} - \frac{23}{2}$	$\frac{-22}{2}$	
102		VI	54	Breech	1 - 2	2 - 4	2 - 34	
103	18	II	53	Nil				
104	28	II	63	99	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
105	27	II	7	99	$1\frac{1}{4} - 2$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
106	20	I	64	"	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
107	20	II	53	99	$\frac{3}{4} - 1\frac{3}{4}$	$2 - 3\frac{3}{4}$	2 - 33	
108	18	I	6	"	1 - 2	2 - 4	2 - 4	
109	21	I	$6\frac{1}{2}$	Forceps,	$1 - 1\frac{3}{4}$	$1\frac{3}{4} - 2\frac{3}{4}$	$1\frac{3}{4} - 2\frac{3}{4}$	
1000	44		Twins	Epis.	41 0	0 03	0 07	
110	35	II	5-4½	Nil	$1\frac{1}{4} - 2$	$2 - 3\frac{3}{4}$	2 - 33	
111	33	V	8½	99	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{2}$	
112	18	I	Breech		$\frac{3}{4} - 1\frac{3}{4}$	$1\frac{3}{4} - 3\frac{1}{4}$	$1\frac{3}{4} - 3\frac{1}{2}$	
113	22	III	7	",	$\frac{4}{1} - \frac{14}{2}$	$\frac{14}{2} - \frac{34}{4}$	$\frac{1}{4} - \frac{3}{2}$	
113	28	IV	5	99	1 - 2	$\frac{2}{2} - \frac{3}{3}$	$2 - 3\frac{3}{4}$	
	24	II	$6\frac{3}{4}$	99	1 - 2	$\frac{2}{2} - \frac{34}{4}$	2 - 4	
115		I	73	**	1 - 2	2 - 4	$\frac{2}{2} - \frac{4}{4}$	
116	15	I		Epis.	$\frac{1}{1} - \frac{2}{4}$	$\frac{2}{2} - \frac{4}{3}$	$\frac{2}{2} - \frac{44}{3}$	
117	18		634	Epis. Nil	$\frac{1}{1} - \frac{24}{2}$	$\frac{2}{2} - \frac{33}{4}$	$\frac{2}{2} - \frac{3}{2}$	
118	21	II	5½		1 - 2	$2 - 3\frac{1}{4}$	$\frac{2}{2} - 3\frac{1}{2}$	
119	30	I	5	Epis.			-	
120	20	I	53	Forceps,	14 - 14	14 - 21	13 - 22	

Measurements

Reg. No.	Age	Para	Weight of	Tear	Perineum Antero- Posterior (Inches)	Vulval- Vertical (Inches)	Perineal- Transverse (Inches)	Remarks
121	.28	VII	61	Nil	11/4 - 21/4	21 - 4	$2\frac{1}{4} - 4$	
122	37	VIII	61	>>	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
123	26	IV	8	23	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{4}$	
124	22	I	6	,,	1 - 2	2 - 4	2 - 4	
125	25	III	6	,,	1 - 2	2 - 4	2 - 4	
126	30	II	63	"	1 - 2	2 - 4	2 - 4	
127	36	VI	63	31	11 - 2	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	2
128	39	V	73	37	$1\frac{1}{2} - 2\frac{1}{2}$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4\frac{1}{4}$	-
129	39	VII	63	31	1 - 2	2 - 4	2 - 4	
130	28	IV	63	31	1 - 2	2 - 4	2 - 4	
131	21	II	54		1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
132	25	III	$6\frac{3}{4}$	Sp. tear	1 - 21	$\frac{2}{2} - \frac{34}{3}$	2 - 4	
133	23	II	$6\frac{3}{4}$		$\frac{3}{4} - 2$	$\frac{13}{4} - \frac{33}{4}$	2 - 4	
134	27	III	$6\frac{3}{4}$	Nil	1 - 2	2 - 4	2 - 4	
	30	I			1 - 2	$\frac{2}{2} - \frac{4}{34}$	$\frac{2}{2} - \frac{4}{34}$	
135	31		63	Epis. Nil	1 - 2	$2 - 3\frac{3}{4}$ $2 - 3\frac{3}{4}$	2 - 34	
136		VII	53					
37	24	II	63	"	$1\frac{1}{4} - 2\frac{1}{4}$	2 - 4	2 - 4	
138	24	I	5	Breech		0 09	03	
	00		0.7	Epis.	1 - 2	2 - 33	2 - 33	
139	28	III	63	Nil	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
140	32	VI	73	33	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4\frac{1}{4}$	
141	24	III	$6\frac{1}{2}$	**	1 - 2	2 - 4	2 - 4	- 01
142	28	V	73	99	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	24 - 44	
143	30	III	6	11	$\frac{3}{4} - 2$	$2 - 3\frac{3}{4}$	2 - 4	
144	25	IV	63	**	1 - 2	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
145	26	III	6		1 - 2	2 - 4	2 - 4	
146	35	IX	7½	37	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4\frac{1}{2}$	
147	24	II	53	33	$1\frac{1}{4} - 2$	$1\frac{3}{4} - 3\frac{3}{4}$	$1\frac{3}{4} - 3\frac{3}{4}$	
148	25	III	73	,,	1 - 2	2 - 4	2 - 41	
149	28	III	73	Sp. tear	$1 - 2\frac{3}{4}$	2 - 4	2 - 4	
150	22	I	5	Nil	1 - 2	$1\frac{3}{4} - 3\frac{3}{4}$	$1\frac{3}{4} - 4$	
151	23	II	6	Nil	1 - 2	2 - 33	2 - 4	
152	27	V	7	**	1 - 2	2 - 4	2 - 4	
153	19	I	7	Forceps Epis.	$1 - 1\frac{1}{2}$	$1\frac{3}{4} - 2\frac{1}{4}$	$1\frac{3}{4} - 2\frac{1}{2}$	
154	24	III	71/2	Nil	1 - 2	2 - 4	2 - 4	1
155	23	III	64	,,	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
156	23	I	7	17	1 - 2	2 - 4	2 - 4	
157	31	II	8			$2 - 4\frac{1}{2}$		
158	28	III	61	"	1 - 2	2 - 4	2 - 4	
200		-11	Twins	**				
159	28	II	54-53		1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
		III	73	"	$1\frac{1}{4} - 2\frac{1}{4}$	$\frac{2}{2} - \frac{34}{4}$	2 - 44	
160	27			"	$\frac{14}{1} - \frac{24}{2}$	$2 - 3\frac{3}{4}$	2 - 4	
161	30	III	53	99	$1 - 2$ $1\frac{1}{4} - 2\frac{1}{4}$	2 - 4	2 - 4	
162	24	II	63	**	$\frac{1}{4} - \frac{2}{4}$ $\frac{1}{4} - \frac{2}{4}$	$\frac{2}{2^{1}} - 4$	$\frac{2}{2\frac{1}{2}} - 4$	
163	35	V	71	**		$\frac{2^{2}}{1^{3}} - \frac{4}{3^{1}}$		-
164	30	I	43	27	$\frac{3}{4} - 1\frac{3}{4}$	14 - 35	$1\frac{3}{4} - 3\frac{1}{2}$	

Measurements

Reg. No.	Age	Para	Weight of	Tear	Perineum Antero-	Vulval- Vertical	Perineal- Transverse	Remarks
					Posterior (Inches)	(Inches)	(Inches)	
165	20		(Premature)				
166	20	I	8	Sp. tear	$1\frac{1}{4} - 2\frac{1}{4}$	$2 - 4\frac{1}{4}$	$2 - 4\frac{1}{4}$	
		I	63	Epis.	$1 - 2\frac{3}{4}$	$1\frac{3}{4} - 3\frac{1}{2}$	$2 - 3\frac{3}{4}$	
167	30	IV	73	Nil	1 - 2	2 - 4	2 - 4	
168	30	II	63	Breech Nil	1 - 2	$2 - 4\frac{1}{4}$	$2 - 4\frac{1}{4}$	
169	25	II	63	Sp. tear	1 - 2	2 - 4	2 - 4	
170	26	IV	6	Nil	$1 - 2\frac{1}{4}$	2 - 4	2 - 4	
171	26	I	6	**	1 - 2	2 - 4	2 - 4	
172	25	II	7	19	1 - 2	2 - 4	2 - 4	
173	30	II	61	**	1 - 2	2 - 4	2 - 4	
174	19	I	63	Epis.	$1\frac{1}{4} - 2\frac{3}{4}$	$2\frac{1}{4} - 3\frac{3}{4}$	24 4 34	
175	28	III	6	Nil	1 - 2	2 - 4	2 - 4	
176	30	III	53	33	1 - 2	$2 - 3\frac{3}{4}$	2 - 4	
177	25	IV	74	"	$1 - 2\frac{1}{4}$	2 - 4	2 - 4	
178	20	I	71	,,	1 - 2	2 - 4	$2 - 4\frac{1}{4}$	
179	19	I	6	,,	1 - 2	2 - 4	2 - 4	
180	30	IV	64	99	1 - 2	2 - 4	2 - 4	
181	30	VI	71/2	Nil	1 - 2	2 - 4	2 - 4	
182	26	II	61	,,	1 - 2	2 - 4	2 - 4	
183	22	II	$6\frac{1}{4}$	91	1 - 2	2 - 4	2 - 4	
184	22	I	54	,,	$1 - 1\frac{3}{4}$	2 - 33	$2 - 3\frac{3}{4}$	
185	40	IX	8	11	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{2} - 4\frac{1}{2}$	$2\frac{1}{2} - 4\frac{1}{4}$	
186	24	III	53	99	1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
187	24	I	64	Epis.	$1 - 2\frac{1}{4}$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
188	24	II	6	Nil	1 - 2	2 - 4	2 - 4	
189	21	I	$6\frac{3}{4}$	Sp. tear	$1 - 2\frac{1}{4}$	2 - 33	2 - 4	
190	35	V	71	Nil	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
191	28	II	64	Sp. tear	$1\frac{1}{4} - 2\frac{1}{2}$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
192	24	III	6	Nil	1 - 2	$2 - 3\frac{3}{4}$	2 - 4	
193	22	II	$5\frac{1}{2}$	99	$\frac{3}{4} - 1\frac{3}{4}$	$2 - 3\frac{3}{4}$	2 - 33	
194	26	IV	7	97	$1\frac{1}{4} - 2\frac{1}{2}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
195	32	IV	61	"	1 - 2	2 - 4	2 - 4	
196	24	I	6	Epis .	1 - 2	$2 - 3\frac{1}{2}$	$2 - 3\frac{3}{4}$	
197	35	VI	6	Nil	1 - 2	2 - 4	2 - 4	
198	25	II	64	,,	1 - 2	2 - 4	2 - 4	
199	24	III	73	37	$1\frac{1}{2} - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4\frac{1}{4}$	
200	36	VI	53	99	$1\frac{1}{2} - 2$	$2 - 3\frac{3}{4}$	2 - 4	
201	36	VI	61	33	1 - 2	2 - 4	2 - 4	
202	25	II	74	Epis.	$1 - 2\frac{1}{2}$	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	-
203	22	II	6	Nil	1 - 2	2 - 4	2 - 4	-
204	33	IV	6	"	$\frac{3}{4} - 2$	2 - 4	2 - 4	
205	40	X	71/2	"	$1\frac{1}{2} - 2\frac{1}{2}$	$2\frac{1}{2} - 4$	$2\frac{1}{2} - 4$	
206	30	III	63	27	1 - 2	2 - 4	2 - 4	
207	24	I	6	Sp. tear	1 - 24	2 - 4	2 - 4	
208	30	II	6	39	$1\frac{1}{4} - 2\frac{1}{4}$	$2\frac{1}{4} - 3\frac{3}{4}$	$2\frac{1}{4} - 4$	
209	21	I	53	Nil	1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
400	28	III	7	39	1 - 2	2 - 4	2 - 4	

Measurements

Reg. No.	Age	Para	Weight of	Tear	Perineum Antero- Posterior (Inches)	Vulval- Vertical (Inches)	Perineal- Transverse (Inches)	Remarks
211	20	I	6	Nil	11/4 - 2	2 - 4	2 - 4	
212	22	II	61	27	$1 - 2\frac{1}{4}$	$2\frac{1}{2} - 4$	$2^{1}_{2} - 4$	
213	28	III	6½	,,	$1 - 2\frac{1}{4}$	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
214	27	· I	53	Epis.	$\frac{3}{4} - 2$	$1\frac{3}{4} - 3\frac{1}{2}$	$1\frac{3}{4} - 3\frac{1}{2}$	
215	19	I	7	Nil	1 - 2	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
216	30	V	6	,,	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
217	20	II	63	Epis.	$1\frac{1}{4} - 2\frac{3}{4}$	$2\frac{1}{4} - 3\frac{3}{4}$	$2\frac{1}{4} - 3\frac{3}{4}$	
218	22	I	53	Nil	1 - 2	2 - 4	2 - 4	
219	18	I	63	**	1 - 2	2 - 4	2 - 4	
220	30	V	81	"	$1 - 2\frac{1}{4}$	$2 - 4\frac{1}{4}$	$2 - 4\frac{1}{2}$	
221	30	V	51	46	1 - 2	$2 - 3\frac{3}{4}$	$2 - 3\frac{3}{4}$	
222	30	VI	6	99	1 - 2	2 - 4	2 - 4	
223	20	I	7	"	$1\frac{1}{4} - 2$	2 - 4	2 - 4	
224	25	I	63	Sp. tear	11 - 21	$2\frac{1}{4} - 4$	$2\frac{1}{4} - 4$	
225	30	IV	6	Nil	1 - 2	2 - 33	2 - 4	
226	25	I	6	,,	$1\frac{1}{4} - 2$	2 - 4	2 - 4	