

LITERATURE REVIEW

Team ID	PNT2022TMID01683
Project Name	Plasma Donor Application
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S.NO	TITLE	AUTHOR	YEAR	INFERENCE
1.	INSTANT PLASMA DONOR RECIPIENT CONNECTOR WEBAPPLICATION	1.KALPANADEVI GUNTOJU 2.TEJASWINI JALLI 3.SREEJA UPPALA 4.SANJAY MALLISETTAI	2022	*THIS PAPER PRESENT THE DESIGN TO DESIGN A USER-FRIENDLY WEB APPLICATION THAT IS LIKE A SCIENTIFIC VEHICLE FROM WHICH WE CAN HELP REDUCE MORTALITY OR HELP THOSE AFFECTED BY COVID19 BY DONATING PLASMA FROM PATIENTS WHO HAVE RECOVERED WITHOUT APPROVED ANTIRETROVIRAL THERAPY PLANNING FOR A DEADLY COVID19 INFECTION, PLASMA THERAPY IS AN EXPERIMENTAL APPROACH TO TREAT THOSE COVID-POSITIVE PATIENTS AND HELP THEM RECOVER FASTER. *THE MAIN PURPOSE OF THE PROPOSED SYSTEM, THE DONOR WHO WANTS TO DONATE PLASMA CAN SIMPLY UPLOAD THEIR COVID19 TRACED CERTIFICATE AND CAN DONATE THE

				<p>PLASMA TO THE BLOOD BANK, THE BLOOD BANK CAN APPLY FOR THE DONOR AND ONCE THE DONOR HAS ACCEPTED THE REQUEST, THE BLOOD BANK CAN ADD THE UNITS THEY NEED AND THE HOSPITAL CAN ALSO SEND THE REQUEST TO THE BLOOD BANK THAT URGENTLY NEEDS THE PLASMA FOR THE PATIENT AND CAN TAKE THE PLASMA FROM THE BLOOD BANK.</p>
2.	<p>INFLUENCE OF THE APPLICATION OF PLATELET-ENRICHED PLASMA IN ORAL MUCOSAL WOUND HEALING</p>	<p>1.JEROME AH LINDEBOOM 2.KESHEN R MATHURA 3.IRENE HA AARTMAN 4.FRANS HM KROON 5.DanMJ Milstein 6.Can Ince</p>	2007	<p>*THIS PAPER PRESENT THE STUDY TO DESCRIBE AND QUANTIFY THE THERAPEUTIC VALUE OF PLATELET CONCENTRATE ON THE CAPILLARY DENSITY IN ORAL MUCOSAL WOUND HEALING. *TEN PATIENTS, FIVE MALES AND FIVE FEMALES, WERE INCLUDED IN THE STUDY WITH A MEAN AGE OF 54.2 ± 9.1 YEARS FOR FEMALES AND 57.6 ± 6.9 YEARS FOR MALES. DONOR PLATELET COUNTS FROM WHOLE BLOOD HAD A MEAN VALUE OF $248.5 \pm 13.5 \times 10^9/L$, WHILE THE VALUE OF PLATELET COUNTS IN THE PRP HAD A MEAN OF $975.9 \pm 97.9 \times 10^9/L$. WOUND HEALING WAS SIGNIFICANTLY ACCELERATED IN THE PRP-TREATED MUCOSAL WOUNDS DURING THE FIRST 10 POSTOPERATIVE</p>

				DAYS. AFTER THE SECOND WEEK, NO OBVIOUS DIFFERENCES BETWEEN THE PRP OR PLACEBO SIDE COULD BE NOTED.
3.	APPLICATION OF AUTOLOGOUS PLATELET-RICH PLASMA TO GRAFT DONOR SITES TO REDUCE PAIN AND PROMOTE HEALING	1.SAMARTH GUPTA 2. RAKESH KUMAR JAIN	2022	<p>*THIS PAPER PRESENT THAT PLATELET-RICH PLASMA (PRP) IS WIDELY USED FOR WOUND HEALING IN MEDICAL CARE BECAUSE OF THE NUMEROUS GROWTH FACTORS IT CONTAINS. TRADITIONALLY, DONOR SITES ARE LEFT TO HEAL WITH A PRIMARY DRESSING SO WOUNDS ARE NOT LEFT OPEN. HOWEVER, A DELAY IN HEALING ACCOMPANIED BY PAIN AT A DONOR SITE IS OFTEN SEEN. THIS STUDY PRIMARILY THROWS LIGHT ON THE USE OF AUTOLOGOUS PRP OVER SPLIT-THICKNESS SKIN GRAFT (STSG) DONOR SITES TO PROMOTE HEALING AND REDUCE PAIN.</p> <p>*A TOTAL OF 100 PATIENTS WERE INCLUDED IN THE STUDY. PATIENTS IN THE PRP GROUP SHOWED STATISTICALLY SIGNIFICANT FASTER HEALING AT POSTOPERATIVE DAY 14 COMPARED WITH THE CONTROL GROUP ($P<0.05$), WHO REQUIRED DRESSINGS FOR 3-4 WEEKS POSTOPERATIVELY. PAIN SCALE SCORES IN THE POSTOPERATIVE PERIOD</p>

				WERE SIGNIFICANTLY LESS IN THE PRP GROUP AT SIX HOURS POSTOPERATIVELY COMPARED WITH THE CONTROL GROUP ($P<0.05$). THERE WAS A REDUCED INCIDENCE OF HYPERTROPHIC SCAR FORMATION IN THE SMALL NUMBER OF PATIENTS IN THE PRP GROUP WHO HAD DEVELOPED HYPERTROPHIC SCAR PREVIOUSLY.
4.	THE BIOLOGY OF PLATELET-RICH PLASMA AND ITS APPLICATION IN TRAUMA AND ORTHOPAEDIC SURGERY	1.J. ALSOUSOU 2.M.THOMPSON 3. P. HULLEY 4. A. NOBLE 5.K. WILLETT	2009	<p>*ALTHOUGH MECHANICAL STABILISATION HAS BEEN A HALLMARK OF ORTHOPAEDIC SURGICAL MANAGEMENT, ORTHOBIOLOGICS ARE NOW PLAYING AN INCREASING ROLE. PLATELET-RICH PLASMA (PRP) IS A VOLUME OF PLASMA FRACTION OF AUTOLOGOUS BLOOD HAVING PLATELET CONCENTRATIONS ABOVE BASELINE.</p> <p>* THE PLATELET A GRANULES ARE RICH IN GROWTH FACTORS THAT PLAY AN ESSENTIAL ROLE IN TISSUE HEALING, SUCH AS TRANSFORMING GROWTH FACTOR-B, VASCULAR ENDOTHELIAL GROWTH FACTOR, AND PLATELET-DERIVED GROWTH FACTOR. PRP IS USED IN VARIOUS</p>

				<p>SURGICAL FIELDS TO ENHANCE BONE AND SOFT-TISSUE HEALING BY PLACING SUPRAPHYSIOLOGICAL CONCENTRATIONS OF AUTOLOGOUS PLATELETS AT THE SITE OF TISSUE DAMAGE. THE EASILY OBTAINABLE PRP AND ITS POSSIBLE BENEFICIAL OUTCOME HOLD PROMISE FOR NEW REGENERATIVE TREATMENT APPROACHES.</p>
5.	<p>NEAREST BLOOD & PLASMA DONOR FINDING: A MACHINE LEARNING APPROACH</p>	<p>1. NAYAN DAS 2. MD. ASIF IQBAL</p>	2020	<p>*THIS PAPER PRESENT THE NECESSITY OF BLOOD HAS BECOME A SIGNIFICANT CONCERN IN THE PRESENT CONTEXT ALL OVER THE WORLD. DUE TO A SHORTAGE OF BLOOD, PEOPLE COULDN'T SAVE THEMSELVES OR THEIR FRIENDS AND FAMILY MEMBERS. A BAG OF BLOOD CAN SAVE A PRECIOUS LIFE. STATISTICS SHOW THAT A TREMENDOUS AMOUNT OF BLOOD IS NEEDED YEARLY BECAUSE OF MAJOR OPERATIONS, ROAD ACCIDENTS, BLOOD DISORDERS, INCLUDING ANEMIA, HEMOPHILIA, AND ACUTE VIRAL INFECTIONS LIKE DENGUE, ETC. * APPROXIMATELY 85 MILLION PEOPLE REQUIRE SINGLE OR MULTIPLE BLOOD TRANSFUSIONS FOR TREATMENT.</p>

				<p>VOLUNTARY BLOOD DONORS PER 1,000 POPULATION OF SOME COUNTRIES ARE QUITE PROMISING, SUCH AS SWITZERLAND (113/1,000), JAPAN (70/1,000), WHILE OTHERS HAVE AN UNSATISFYING RESULT LIKE INDIA HAS 4/1,000, AND BANGLADESH HAS 5/1000.</p> <p>*RECENTLY A LIFE-THREATENING VIRUS, COVID-19, SPREADING THROUGHOUT THE GLOBE, WHICH IS MORE VULNERABLE FOR OLDER PEOPLE AND THOSE WITH PRE-EXISTING MEDICAL CONDITIONS. FOR THEM, PLASMA IS NEEDED TO RECOVER THEIR ILLNESS. OUR PURPOSE IS TO BUILD A PLATFORM WITH CLUSTERING ALGORITHMS WHICH WILL JOINTLY HELP TO PROVIDE THE QUICKEST SOLUTION TO FIND BLOOD OR PLASMA DONOR. CLOSEST BLOOD OR PLASMA DONORS OF THE SAME GROUP IN A PARTICULAR AREA CAN BE EXPLORED WITHIN LESS TIME AND MORE EFFICIENTLY.</p>
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